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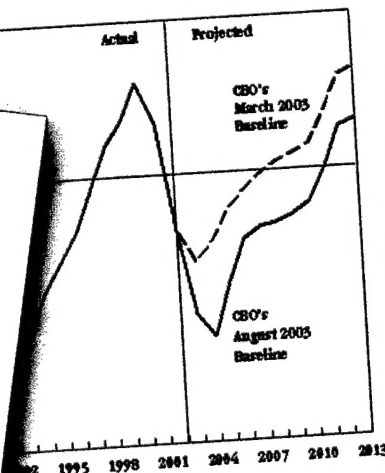
The Budget and Economic Outlook

UPDATE

Table 1-6.
The Budgetary Effects of Policy Alternatives Not Included in CBO's Baseline
(In billions of dollars)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Policy Alternatives That Increase the Deficit or Reduce the Surplus (Negative amounts indicate an increase in the deficit or a reduction in the surplus)												
Extend Expiring Tax Provisions ^a	3	-59	-113	-116	-109	-110	-108	-242	-349	-361	-393	-1,564
Reform the Alternative Minimum Tax ^b	0	-8	-24	-34	-46	-60	-74	-64	-40	-49	-112	-400
Reform Medicare, Including Adding a Prescription Drug Benefit, at the Level Assumed in the Budget Resolution	-7	-10	-33	-38	-43	-46	-50	-53	-56	-64	-131	-400
Appropriations	-12										-270	-1,392
Increase in GDP												

Figure 1-1.
The Total Deficit or Surplus as a Share of GDP, 1965-2013
(Percentage of GDP)



Summary Table 2.
Changes in CBO's Baseline Projections of the Deficit or Surplus Since March 2003
(In billions of dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Total Deficit (-) or Surplus as Projected in March 2003	-246	-200	-123	-57	-9	27	61	96	231	405	459	-362	891
Changes													
Legislative													
Revenues	-53	-135	-77	-20	-13	-17	-11	-4	4	2	2	-263	-270
Outlays	-46	-92	-101	-105	-117	-129	-140	-150	-162	-172	-184	-544	-1,352
Subtotal	-99	-227	-178	-126	-130	-146	-151	-155	-158	-169	-183	-808	-1,622
Economic													
Revenues	-16	-13	-12	-12	-15	-17	-19	-23	-20	-12	-8	-70	-151
Outlays	-16	-12	-31	-34	-25	-16	-16	-17	-24	-28	-28	-118	-223
Subtotal													
Technical													
Revenues	-53	-51	-51	-51	-55	-50	-45	-41	-39	-40	-34	-258	-457
Outlays	-13	-1	-6	-12	-19	-27	-33	-39	-44	-47	-51	-280	-737
Subtotal	-40	-51	-57	-63	-74	-77	-80	-82	-87	-86	-85	-538	-1,194
Total Impact on the Deficit or Surplus	-155	-280	-218	-168	-194	-223	-232	-240	-240	-245	-248	-1,083	-2,287
Total Deficit (-) or Surplus as Projected in August 2003	-401	-480	-341	-225	-203	-223	-240	-240	-245	-248	-248	-1,083	-2,287

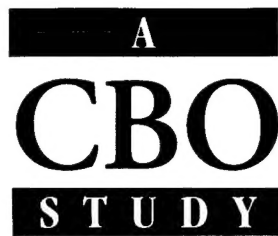
A REPORT TO THE SENATE AND
HOUSE COMMITTEES ON THE BUDGET



AUGUST 2003

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The Budget and Economic Outlook: An Update

August 2003

Notes

Unless otherwise indicated, all years referred to in Chapter 2 are calendar years, and all years in the rest of the report are federal fiscal years (which run from October 1 to September 30).

Numbers in the text and tables may not add up to totals because of rounding.

Some of the figures in Chapter 2 use shaded vertical bars to indicate periods of recession. The bars extend from the peak to the trough of each recession.

Data for real (inflation-adjusted) gross domestic product are based on chained 1996 dollars.



Preface

This volume is one of a series of reports on the state of the budget and the economy that the Congressional Budget Office (CBO) issues each year. It satisfies the requirement of section 202(e) of the Congressional Budget Act of 1974 for CBO to submit to the Committees on the Budget periodic reports about fiscal policy and to provide five-year baseline projections of the federal budget. In accordance with CBO's mandate to provide impartial analysis, the report makes no recommendations.

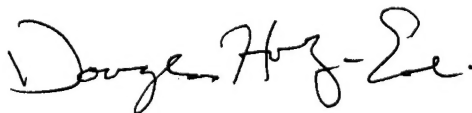
The baseline spending projections were prepared by the staff of CBO's Budget Analysis Division under the supervision of Robert Sunshine, Peter Fontaine, Janet Airis, Thomas Bradley, Kim Cawley, Paul Cullinan, Jeffrey Holland, and Jo Ann Vines. The revenue estimates were prepared by the staff of the Tax Analysis Division under the supervision of Thomas Woodward, Mark Booth, and David Weiner. The analysts who contributed to those spending and revenue projections are listed in Appendix D.

The economic outlook presented in Chapter 2 was prepared primarily by the Macroeconomic Analysis Division under the direction of Robert Dennis. John F. Peterson and Robert Arnold carried out the economic forecast and projections. David Brauer, Ufuk Demiroglu, Tracy Foertsch, Theresa Gullo, Douglas Hamilton, Juann Hung, Kim Kowalewski, Mark Lasky, Leo Lux, Angelo Mascaro, Shinichi Nishiyama, Benjamin Page, Frank Russek, Robert Shackleton, John Sturrock, and Christopher Williams contributed to the analysis. Tumi Coker, Tina Highfill, Brian Mathis, and Amrita Palriwala provided research assistance.

CBO's Panel of Economic Advisers commented on an early version of the economic forecast underlying this report. Members of the panel are Andrew B. Abel, Alan Blinder, Michael J. Boskin, Barry P. Bosworth, Dan Crippen, Robert G. Dederick, William C. Dudley, Martin Feldstein, Robert J. Gordon, Robert E. Hall, Allan Meltzer, William D. Nordhaus, June E. O'Neill, Rudolph G. Penner, James Poterba, Robert Reischauer, Alice Rivlin, and Joel Slemrod. Richard Berner, Vincent Reinhart, and Mark Zandi attended the panel's meeting as guests. Although CBO's outside advisers provided considerable assistance, they are not responsible for the contents of this report.

Jeffrey Holland wrote the summary. The staff of the Projections Unit and Mark Booth wrote Chapter 1. Tracy Foertsch was the lead author for Chapter 2. Gerard Trimarco wrote Appendix A, and Barry Blom and Frank Russek wrote Appendix B.

Christine Bogusz, Leah Mazade, John Skeen, and Christian Spoor edited the report. Marion Curry, Linda Lewis Harris, and Denise Williams assisted in its preparation. Sharon Corbin-Jallow and Christian Spoor prepared the report for publication, and Annette Kalicki produced the electronic versions for CBO's Web site (www.cbo.gov).



Douglas Holtz-Eakin
Director

August 2003

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Summary

The Congressional Budget Office (CBO) projects that the federal government will incur deficits of \$401 billion in 2003 and \$480 billion in 2004 under the assumption (mandated by statute) that current laws and policies remain the same (*see Summary Table 1*). Those deficits reflect the recent economic slowdown as well as legislation enacted over the past few years that has reduced revenues and rapidly increased spending for defense and many other programs. Although such deficits for this year and next year would be smaller than those of the mid-1980s relative to the size of the economy, they would reach record levels in nominal dollar terms.

The economy now seems poised for a more sustained recovery. CBO anticipates that gross domestic product (GDP) will rise by nearly 4 percent in calendar year 2004 after growing by less than 2 percent in the first half of this year. Signs of faster growth in consumer and business spending, rapid growth in federal purchases, tax cuts for businesses, and a slightly more accommodative monetary

policy have improved the economic outlook for the rest of 2003 and for 2004.

Partly because of that economic growth, CBO's baseline projections show deficits that diminish and then give way to surpluses near the end of the 2004-2013 period—under the assumption that no policy changes occur. In particular, the baseline assumes that the major tax provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) will expire as scheduled in 2010. It also assumes (as required by the Balanced Budget and Emergency Deficit Control Act of 1985) that budget authority for discretionary programs will grow at the rate of inflation—which is projected to average 2.7 percent over the next 10 years. Furthermore, the baseline does not include possible policy changes such as the introduction of a prescription drug benefit for Medicare beneficiaries. Various combinations of possible actions could easily lead to a prolonged period of budget deficits, although other scenarios could be more favorable. In ad-

Summary Table 1.

Projected Deficits and Surpluses in CBO's Baseline

(In billions of dollars)

(In billions of dollars)

	Actual												Total, 2004- 2008	Total, 2004- 2013
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
On-Budget Deficit (-)	-317	-562	-644	-520	-425	-421	-434	-426	-417	-298	-143	-105	-2,444	-3,833
Off-Budget Surplus ^a	<u>160</u>	<u>162</u>	<u>164</u>	<u>179</u>	<u>199</u>	<u>219</u>	<u>237</u>	<u>255</u>	<u>273</u>	<u>289</u>	<u>304</u>	<u>317</u>	<u>999</u>	<u>2,436</u>
Total Deficit (-) or Surplus	-158	-401	-480	-341	-225	-203	-197	-170	-145	-9	161	211	-1,445	-1,397

Source: Congressional Budget Office.

a. Off-budget surpluses comprise surpluses in the Social Security trust funds as well as the net cash flow of the Postal Service.

Summary Table 2.

Changes in CBO's Baseline Projections of the Deficit or Surplus Since March 2003
(In billions of dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Total Deficit (-) or Surplus as Projected in March 2003	-246	-200	-123	-57	-9	27	61	96	231	405	459	-362	891
Changes													
Legislative													
Revenues	-53	-135	-77	-20	-13	-17	-11	-4	4	2	2	-263	-270
Outlays	<u>46</u>	<u>92</u>	<u>101</u>	<u>105</u>	<u>117</u>	<u>129</u>	<u>140</u>	<u>150</u>	<u>162</u>	<u>172</u>	<u>184</u>	<u>544</u>	<u>1,352</u>
Subtotal	-99	-227	-178	-126	-130	-146	-151	-155	-158	-169	-183	-808	-1,622
Economic													
Revenues	-16	-13	-12	-12	-15	-17	-19	-23	-20	-12	-8	-70	-151
Outlays	<u>*</u>	<u>-12</u>	<u>-31</u>	<u>-34</u>	<u>-25</u>	<u>-16</u>	<u>-16</u>	<u>-17</u>	<u>-20</u>	<u>-24</u>	<u>-28</u>	<u>-118</u>	<u>-223</u>
Subtotal	-16	-1	18	21	10	*	-3	-6	*	11	21	48	72
Technical													
Revenues	-53	-51	-51	-51	-55	-50	-45	-41	-39	-40	-34	-258	-457
Outlays	<u>-13</u>	<u>1</u>	<u>6</u>	<u>12</u>	<u>19</u>	<u>27</u>	<u>33</u>	<u>39</u>	<u>44</u>	<u>47</u>	<u>51</u>	<u>66</u>	<u>280</u>
Subtotal	-40	-51	-58	-64	-74	-77	-78	-80	-82	-87	-86	-324	-737
Total Impact on the Deficit or Surplus	-155	-280	-218	-168	-194	-223	-232	-240	-240	-245	-248	-1,083	-2,287
Total Deficit (-) or Surplus as Projected in August 2003	-401	-480	-341	-225	-203	-197	-170	-145	-9	161	211	-1,445	-1,397
Memorandum:													
Legislative Changes to Discretionary Outlays													
Defense	27	54	62	65	66	68	70	72	74	75	77	315	683
Nondefense	<u>6</u>	<u>14</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>19</u>	<u>20</u>	<u>20</u>	<u>21</u>	<u>21</u>	<u>22</u>	<u>87</u>	<u>190</u>
Total	33	68	79	83	85	87	90	92	95	96	99	402	873

Source: Congressional Budget Office.

Note: * = between -\$500 million and \$500 million.

dition, economic and other factors that deviate from CBO's assumptions could affect the budget considerably—in either a positive or a negative direction.

Regardless of the precise course of the economy and future policy actions, significant long-term strains on spending will begin to intensify within the next decade as the baby-boom generation begins reaching retirement age. Driving those pressures on the budget will be growth in the largest retirement and health programs—Social Security, Medicare, and Medicaid. Federal spending on

those three programs will consume a growing proportion of budgetary resources, rising as a share of the economy from 8 percent in 2002 to a projected level of nearly 14 percent in 2030.

The Budget Outlook

CBO projects that if current laws and policies remain unchanged, the recent surge in federal budget deficits will peak in 2004. In the ensuing years, under CBO's baseline, deficits decline steadily and give way to surpluses

near the end of the 10-year projection period. Deficits are projected to total \$1.4 trillion between 2004 and 2008; the following five years show a small net surplus of less than \$50 billion.

Revenues have slid from a peak of 20.8 percent of GDP in 2000 to 16.5 percent this year and are anticipated to drop again next year, to 16.2 percent. From that point on, the trend reverses, as projected economic growth pushes revenues in the baseline up from 17.4 percent of GDP in 2005 to 18.7 percent in 2010. Under current laws and policies, revenues are projected to climb more rapidly thereafter because of the expiration of EGTRRA, reaching 20.5 percent of GDP in 2013.

Whereas revenues are expected to diminish in 2003, CBO anticipates that total outlays will rise—from 19.5 percent of GDP in 2002 to 20.2 percent this year. Under the assumptions of CBO's baseline, outlays are projected to peak at 20.5 percent of GDP in 2004 and then to begin a gradual decline as a share of the economy. By 2013, outlays are projected to account for 19.3 percent of GDP. That decline is mostly attributable to the baseline's treatment of discretionary spending, which is assumed to grow at the rate of inflation over the projection period (or at about half the rate of growth projected for the economy).

Since CBO last issued baseline projections in March, the budget outlook has worsened substantially. Half a year ago, CBO estimated that the deficit for 2003 would total \$246 billion, the deficit for 2004 would decline slightly to \$200 billion, and the cumulative total for the 2004-2013 period would be a surplus of \$891 billion. Now, CBO's estimate for this year's deficit has risen by \$155 billion and for next year's by \$280 billion. For the 10-year period from 2004 through 2013, projected deficits have increased and projected surpluses have decreased by a total of nearly \$2.3 trillion (*see Summary Table 2*).

Compared with the projections in the March baseline, revenues have declined by \$122 billion for 2003 and by \$878 billion for the 2004-2013 period. Changes resulting from legislation, mostly the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), account for the majority of the decline through 2005. After that, tech-

nical estimating changes explain most of the drop in projected revenues relative to those in the March baseline.

Outlays are \$33 billion higher for 2003 than previously projected and a total of \$1.4 trillion higher over the 10-year period, largely because of legislation enacted since March. Extending supplemental appropriations enacted in April and August over the 2004-2013 period, as required for CBO's baseline projections, accounts for \$873 billion of that total, and additional debt-service costs resulting from both tax and spending legislation account for most of the rest.

The Economic Outlook

CBO's forecast for the next year and a half anticipates that the growth in overall demand for goods, services, and structures will pick up. The growth of consumer spending will remain modest because consumers are likely to save much of the money that they receive from the accelerated tax cuts under JGTRRA to rebuild their wealth. Businesses are likely to begin to restock, rather than draw down, their inventories and to increase their investments in structures and equipment. As a result, real (inflation-adjusted) GDP is expected to grow by 3.8 percent in calendar year 2004, up from 2.2 percent in 2003 (*see Summary Table 3*). CBO's forecast assumes that the rapid rise in the federal government's spending will contribute to growth for the next few quarters, but thereafter, under the assumptions in CBO's baseline, such growth will slow.

CBO does not anticipate a quick reduction in the unemployment rate from its current level. Typically, the unemployment rate falls when the growth of real GDP exceeds the growth of potential GDP (the highest level of production that can persist for a substantial period without raising inflation). But even though the GDP growth that CBO is forecasting exceeds its estimate of potential GDP, CBO expects that the unemployment rate will average 6.2 percent for calendar years 2003 and 2004. In part, the sustained high rate of unemployment reflects caution on the part of employers, who—if they follow recent patterns—are not likely to resume hiring immediately as demand begins to grow. In part, it also reflects the likelihood that people who have been discouraged in their job searches by the economic weakness

Summary Table 3.**CBO's Current and Previous Economic Projections
for Calendar Years 2003 Through 2013**

	Forecast		Projected Annual Average	
	2003	2004	2005-2008	2009-2013
Nominal GDP (Billions of dollars)				
August	10,836	11,406	14,098 ^a	17,943 ^b
January	10,880	11,465	14,154 ^a	18,066 ^b
Nominal GDP (Percentage change)				
August	3.7	5.3	5.4	4.9
January	4.2	5.4	5.4	5.0
Real GDP (Percentage change)				
August	2.2	3.8	3.3	2.7
January	2.5	3.6	3.2	2.7
GDP Price Index (Percentage change)				
August	1.5	1.4	2.1	2.2
January	1.6	1.7	2.1	2.2
Consumer Price Index ^c (Percentage change)				
August	2.3	1.9	2.5	2.5
January	2.3	2.2	2.5	2.5
Unemployment Rate (Percent)				
August	6.2	6.2	5.4	5.2
January	5.9	5.7	5.3	5.2
Three-Month Treasury Bill Rate (Percent)				
August	1.0	1.7	4.2	4.9
January	1.4	3.5	4.9	4.9
Ten-Year Treasury Note Rate (Percent)				
August	4.0	4.6	5.7	5.8
January	4.4	5.2	5.8	5.8

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Note: Percentage changes are year over year.

a. Level in 2008.

b. Level in 2013.

c. The consumer price index for all urban consumers.

of the past few years are now likely to resume them—and be tallied among the unemployed.

The near-term outlook is subject to a number of risks. Foreign economic growth and foreign demand for U.S. goods may deviate from the assumptions in CBO's forecast. The residual effects of certain economic developments in recent years—the large reduction in households' equity wealth, the fall in the personal saving rate, businesses' productive capacity that remains underused, and the increased dependence on foreign financing—may also

continue to dampen growth more than CBO assumes. However, favorable economic fundamentals—such as low inflation and rapid growth of productivity—may set the stage for another long period of robust growth.

Between 2005 and 2008, the growth of real GDP is projected to average 3.3 percent, and between 2009 and 2013, 2.7 percent. In CBO's projections, the growth of real GDP slows as the gap closes between GDP and its potential; once that gap has been eliminated, real GDP grows at the same rate as potential GDP.

CBO expects that inflation, as measured by the consumer price index for all urban consumers, will average 2.5 percent from 2005 through 2013, while the rate of unemployment will average 5.3 percent. The projection for the

rate on three-month Treasury bills averages 4.6 percent during the 2005-2013 period and that for 10-year Treasury notes, 5.8 percent. All of those projections are virtually identical to the ones published by CBO last January.

The Budget Outlook

If current laws and policies do not change, the federal government will incur a total budget deficit of \$401 billion this year and \$480 billion in 2004, the Congressional Budget Office (CBO) projects (*see Table 1-1*). Although those deficits represent record levels in dollar terms, at about 4 percent of the nation's gross domestic product (GDP) they are smaller than the deficits of the mid-1980s (*see Figure 1-1*). In the absence of further legislative changes, the recent surge in deficits will peak in 2004, CBO estimates; after that, annual deficits will decline steadily before giving way to surpluses early in the next decade. Deficits are projected to total \$1.4 trillion over the next five years. The five years after that show a small net surplus (less than \$50 billion) in CBO's latest projections.

Actual budget totals, however, will almost certainly differ from those baseline projections. By statute, CBO's baseline must estimate the future paths of federal revenues and spending under current laws and policies. The baseline is therefore not intended to be a prediction of future budgetary outcomes; instead, it is meant to serve as a neutral benchmark that lawmakers can use to measure the effects of proposed changes to taxes and spending.

Such changes can significantly affect the budget outlook. For example, legislation enacted since CBO's previous baseline projections were published in March has increased the deficits and reduced the surpluses projected for the next 10 years by a total of \$1.6 trillion.¹ Nearly all of that amount stems from two laws enacted this spring: the

Emergency Wartime Supplemental Appropriations Act, 2003 (Public Law 108-11), and the Jobs and Growth Tax Relief Reconciliation Act (P.L. 108-27).² In addition to policy changes, factors beyond lawmakers' direct control—such as unexpected economic developments—can affect the budget outlook positively or negatively. (CBO's outlook for the economy is explained in detail in Chapter 2.)

In 2002, the federal government recorded a deficit of \$158 billion. This year, its finances have deteriorated sharply because of declining revenues—for the third year in a row—combined with double-digit growth in discretionary spending. (Such spending was accelerating even before \$79 billion in supplemental appropriations for 2003 were enacted in April.) CBO estimates that current tax and spending policies would produce steadily declining deficits after 2004, which would change to surpluses for 2012 and 2013—largely because of increases in revenues from the scheduled expiration of the major tax-cut provisions enacted in 2001.³

Although anticipated policy changes cannot be incorporated in the baseline projections, this report shows how some alternative policy assumptions would affect the budget over the next 10 years. For example, if all expiring tax provisions (except some related to the alternative mini-

1. That estimate includes the increased interest payments on federal debt attributable to legislative changes.

2. As required by the Balanced Budget and Emergency Deficit Control Act of 1985, CBO's baseline includes the current year's supplemental spending in each year of the projection and increases it by the projected rate of inflation.

3. Those provisions were contained in the Economic Growth and Tax Relief Reconciliation Act of 2001 (P.L. 107-16).

Table 1-1.**Projected Deficits and Surpluses in CBO's Baseline**

(In billions of dollars)

	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
On-Budget Deficit (-)	-317	-562	-644	-520	-425	-421	-434	-426	-417	-298	-143	-105	-2,444	-3,833
Off-Budget Surplus ^a	<u>160</u>	<u>162</u>	<u>164</u>	<u>179</u>	<u>199</u>	<u>219</u>	<u>237</u>	<u>255</u>	<u>273</u>	<u>289</u>	<u>304</u>	<u>317</u>	<u>999</u>	<u>2,436</u>
Total Deficit (-) or Surplus	-158	-401	-480	-341	-225	-203	-197	-170	-145	-9	161	211	-1,445	-1,397
Memorandum:														
Social Security Surplus	159	157	164	179	197	216	234	252	269	285	299	312	990	2,406
Postal Service Outlays	-1	-5	*	*	-2	-3	-3	-4	-4	-4	-5	-5	-9	-30
Total Deficit (-) or Surplus as a Percentage of GDP	-1.5	-3.7	-4.3	-2.9	-1.8	-1.5	-1.4	-1.2	-0.9	-0.1	1.0	1.2	-2.3	-1.0
Debt Held by the Public as a Percentage of GDP	34.2	37.1	39.5	40.4	40.1	39.7	39.2	38.5	37.6	36.0	33.4	30.7	n.a.	n.a.

Source: Congressional Budget Office.

Note: * = between -\$500 million and zero; n.a. = not applicable.

a. Off-budget surpluses comprise surpluses in the Social Security trust funds as well as the net cash flow of the Postal Service.

num tax) were extended and a Medicare prescription drug benefit was provided at the cost assumed in the Congressional budget resolution, the baseline budget outlook projected for 2013 would change from a surplus of \$211 billion to a deficit of \$324 billion. Debt held by the public at the end of that year would climb to 44 percent of GDP from the baseline projection of 31 percent of GDP, and the deficit over the 2004-2013 period would total \$3.7 trillion instead of \$1.4 trillion. In the other direction, if the 2003 supplemental appropriations enacted in April were not extended throughout the projection period, the 10-year deficit would shrink to \$0.4 trillion, and debt held by the public at the end of 2013 would drop to 25 percent of GDP.

Over the longer term, the federal budget faces significant strains, which will begin within the current 10-year budget window and intensify as more of the baby-boom generation reaches retirement age. The number of people of retirement age is projected to surge by about 80 percent over the next 30 years, raising costs for federal health and retirement programs. Meanwhile, the number of workers whose taxes help pay for those benefits is expected to grow

by only 15 percent. In addition to that demographic situation, costs per enrollee in federal health care programs are likely to grow much faster than inflation. As a result, spending on Medicare, Medicaid, and Social Security as a share of GDP will rise sharply. In the absence of changes to federal programs, that rise could lead to unsustainable levels of debt.

A Look at 2003

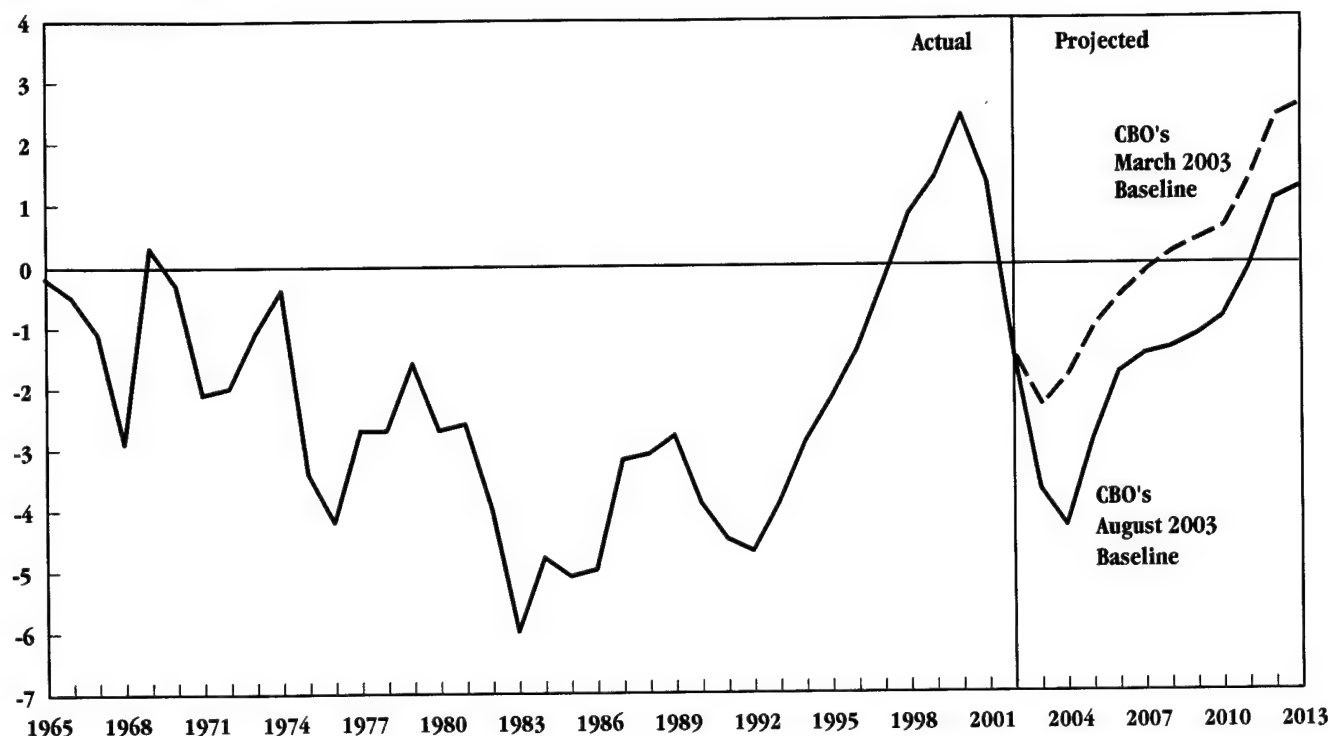
CBO expects the budget deficit to more than double this year as a percentage of GDP: from 1.5 percent last year to 3.7 percent in 2003 (see Table 1-2). That sharp rise in the deficit results from a continuing decline in revenues coupled with a large increase in spending.

Revenues

CBO anticipates that revenues will fall in 2003 for the third consecutive year. After peaking at 20.8 percent of GDP in 2000, revenues are expected to slide to 16.5 percent of GDP this year—their lowest level since 1959. In all, CBO expects revenues in 2003 to fall by \$83 billion, or 4.5 percent, from last year's total. That drop occurs in

Figure 1-1.**The Total Deficit or Surplus as a Share of GDP, 1965-2013**

(Percentage of GDP)



Source: Congressional Budget Office.

each of the major categories of revenue collections: withheld income and payroll taxes, nonwithheld income taxes (including both estimated and final payments), and corporate income taxes.⁴

Receipts from withheld income and payroll taxes are expected to decline by about \$10 billion, or 0.7 percent, in 2003. Withholding has been held down by weak income growth and the tax cuts enacted in 2001 and 2003. If the effects of those cuts in individual taxes were ex-

cluded, withholding would grow by just over 1 percent this year, CBO estimates—more than the 0.5 percent growth recorded last year (also excluding the effects of tax cuts) but far below the 8 percent annual growth averaged from 1995 through 2000.

Nonwithheld payments of individual income taxes (net of refunds) will fall by about \$50 billion this year, CBO estimates. Much of that projected drop relates to taxpayers' liabilities for tax year 2002, either from tax returns filed by April 15 or from estimated payments made earlier in the year. (The effects of recent tax cuts on nonwithheld receipts are very difficult to identify.)

Corporate income tax receipts are expected to decline by \$23 billion, or about 16 percent, in 2003. Recent changes in tax laws make determining the sources of that decline more difficult than usual. However, CBO estimates that corporate receipts would have risen slightly this year in the absence of the tax-law changes enacted after 2000.

4. Those categories do not match the ones shown in Table 1-2, which separates individual income taxes from payroll (social insurance) taxes. Employers withhold both income and payroll taxes from paychecks and remit the combined amount to the Internal Revenue Service without being required to identify the allocation between the two sources. The Treasury Department estimates the division on the basis of its models and then corrects the estimates in later years when more information becomes available. Analyzing income and payroll tax withholding together, therefore, avoids the difficulty of trying to estimate the breakdown between the two.

Table 1-2.
CBO's Baseline Budget Projections

	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008 ^a	Total, 2004- 2013 ^a
In Billions of Dollars														
Revenues														
Individual income taxes	858	791	765	897	1,013	1,099	1,184	1,285	1,392	1,610	1,788	1,916	4,958	12,948
Corporate income taxes	148	125	161	221	259	266	270	274	280	291	303	316	1,177	2,641
Social insurance taxes	701	710	753	795	842	888	933	978	1,025	1,073	1,123	1,177	4,211	9,587
Other	146	144	147	151	162	168	177	185	184	192	216	225	804	1,806
Total	1,853	1,770	1,825	2,064	2,276	2,421	2,564	2,723	2,880	3,165	3,430	3,634	11,150	26,982
On-budget	1,338	1,247	1,276	1,487	1,667	1,780	1,889	2,012	2,135	2,383	2,610	2,774	8,099	20,013
Off-budget	515	523	549	577	609	641	675	710	746	782	820	860	3,051	6,969
Outlays														
Discretionary spending	735	826	900	931	948	969	996	1,022	1,048	1,080	1,100	1,134	4,745	10,128
Mandatory spending	1,105	1,188	1,250	1,289	1,333	1,401	1,482	1,570	1,665	1,776	1,854	1,984	6,755	15,603
Net interest	171	157	155	184	220	255	282	301	312	318	316	305	1,096	2,648
Total	2,011	2,170	2,305	2,404	2,501	2,624	2,761	2,893	3,025	3,174	3,269	3,422	12,595	28,379
On-budget	1,655	1,809	1,920	2,007	2,092	2,201	2,323	2,438	2,552	2,682	2,753	2,879	10,543	23,846
Off-budget	356	361	385	398	409	423	438	455	473	493	517	543	2,052	4,533
Deficit (-) or Surplus	-158	-401	-480	-341	-225	-203	-197	-170	-145	-9	161	211	-1,445	-1,397
On-budget	-317	-562	-644	-520	-425	-421	-434	-426	-417	-298	-143	-105	-2,444	-3,833
Off-budget	160	162	164	179	199	219	237	255	273	289	304	317	999	2,436
Debt Held by the Public	3,540	3,986	4,443	4,790	5,027	5,242	5,450	5,631	5,784	5,800	5,645	5,438	n.a.	n.a.
Memorandum:														
Gross Domestic Product	10,337	10,730	11,245	11,869	12,536	13,219	13,920	14,640	15,375	16,122	16,901	17,729	62,789	143,556
As a Percentage of GDP														
Revenues														
Individual income taxes	8.3	7.4	6.8	7.6	8.1	8.3	8.5	8.8	9.1	10.0	10.6	10.8	7.9	9.0
Corporate income taxes	1.4	1.2	1.4	1.9	2.1	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.8
Social insurance taxes	6.8	6.6	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.6	6.6	6.7	6.7
Other	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.3	1.3	1.3	1.3
Total	17.9	16.5	16.2	17.4	18.2	18.3	18.4	18.6	18.7	19.6	20.3	20.5	17.8	18.8
On-budget	12.9	11.6	11.3	12.5	13.3	13.5	13.6	13.7	13.9	14.8	15.4	15.6	12.9	13.9
Off-budget	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
Outlays														
Discretionary spending	7.1	7.7	8.0	7.8	7.6	7.3	7.2	7.0	6.8	6.7	6.5	6.4	7.6	7.1
Mandatory spending	10.7	11.1	11.1	10.9	10.6	10.6	10.6	10.7	10.8	11.0	11.0	11.2	10.8	10.9
Net interest	1.7	1.5	1.4	1.5	1.8	1.9	2.0	2.1	2.0	2.0	1.9	1.7	1.7	1.8
Total	19.5	20.2	20.5	20.3	20.0	19.9	19.8	19.8	19.7	19.7	19.3	19.3	20.1	19.8
On-budget	16.0	16.9	17.1	16.9	16.7	16.7	16.7	16.7	16.6	16.6	16.3	16.2	16.8	16.6
Off-budget	3.4	3.4	3.4	3.4	3.3	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.3	3.2
Deficit (-) or Surplus	-1.5	-3.7	-4.3	-2.9	-1.8	-1.5	-1.4	-1.2	-0.9	-0.1	1.0	1.2	-2.3	-1.0
On-budget	-3.1	-5.2	-5.7	-4.4	-3.4	-3.2	-3.1	-2.9	-2.7	-1.9	-0.8	-0.6	-3.9	-2.7
Off-budget	1.5	1.5	1.5	1.5	1.6	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.6	1.7
Debt Held by the Public	34.2	37.1	39.5	40.4	40.1	39.7	39.2	38.5	37.6	36.0	33.4	30.7	n.a.	n.a.

Source: Congressional Budget Office.

Notes: n.a. = not applicable.

For details of changes from CBO's previous baseline, see Table 1-7.

a. Numbers in the bottom half of the column are shown as a percentage of cumulative GDP over this period.

The revenue estimates for 2003 are based largely on actual tax collections so far this year, without complete information about either the status of the economy during that period or the details of tax liabilities and payments. Consequently, the underlying economic behavior that has led to the drop in receipts cannot be fully understood. For tax year 2002, summary information from individual income tax returns will not be available until late in calendar year 2003. And a sample of those returns—which is required for a full examination of the sources of receipts—will not be available for inspection until next summer. Information from corporate tax returns is available on a similar schedule. Current collections also reflect economic activity in 2003, and tax returns for that year will not be available until 2005.

Outlays

At the same time that revenues are expected to diminish, total outlays will rise in 2003 by \$160 billion (7.9 percent) from last year's level, CBO estimates. Outlays for discretionary programs—the part of the budget whose spending levels are set anew each year in appropriation acts—are projected to jump by \$91 billion (12.4 percent) this year. Outlays for entitlements and other mandatory programs—whose spending levels are usually governed by eligibility rules and benefit levels set forth in existing laws—are projected to increase by \$83 billion (7.5 percent). Those rises will be partially offset by a decline in net interest costs, which are expected to fall by \$14 billion (8.4 percent), largely because of lower interest rates. Excluding net interest, spending will increase by about 9.5 percent this year, CBO estimates.

The fastest growing component of discretionary spending is defense, which is projected to rise by \$58 billion (about 17 percent) in 2003, reaching \$407 billion. Roughly half of that increase stems from funds provided for the war in Iraq and continuing operations for the war on terrorism. As a result, discretionary defense spending will total about 3.8 percent of GDP this year—the highest level since 1994, but well below the levels recorded during the mid-1980s and early 1990s (which were generally between 4.5 percent and 6 percent of GDP).

Nondefense discretionary spending is expected to grow by \$33 billion (8.5 percent) in 2003, reaching a total of \$419 billion. The largest increases occur for education,

health, and transportation programs. That overall growth will raise nondefense discretionary spending to about 3.9 percent of GDP—its highest level since 1985.

Mandatory spending is expected to rise by 7.5 percent in 2003—down from the nearly 10 percent growth recorded last year. Among the large programs in that category, only Medicare is forecast to grow at a faster rate than it did last year (nearly 8 percent in 2003 compared with 6.4 percent in 2002). Medicare spending continues to rise primarily because of automatic updates to payment rates and increases in caseloads. Social Security spending is expected to grow by about 4 percent this year, a rate dampened by last December's cost-of-living adjustment of 1.4 percent, which was the lowest in several years. Spending for Medicaid will rise by 9.8 percent in 2003, CBO estimates, a slowdown from last year's growth rate of 13.2 percent. That slowdown results mainly from slower growth in enrollment and the implementation of constraints on certain payments to public health care providers. Medicaid's growth rate this year would be even lower had the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) not allotted states nearly \$4 billion in additional funds through an increase in the federal share of Medicaid costs.

Two other legislative changes will boost mandatory spending in 2003. The first is another provision of JGTRRA, which provides \$10 billion in temporary fiscal aid to states, half to be disbursed in 2003. The second involves extensions of temporary emergency unemployment compensation, which will increase spending by almost \$11 billion in 2003.⁵ Including that temporary aid, spending for unemployment benefits will rise from \$51 billion last year to about \$56 billion in 2003, CBO estimates.

For most of the past decade, mandatory spending (net of offsetting receipts) has hovered around 10 percent of GDP. In 2003, such spending will grow to 11.1 percent of GDP—higher than in any other year in U.S. history.

5. That spending stems from a five-month extension of the Temporary Extended Unemployment Compensation Act of 2002 (P.L. 108-1) and the Unemployment Compensation Amendments of 2003 (P.L. 108-26).

Baseline Budget Projections for 2004 Through 2013

CBO projects that if current laws and policies remain the same, the budget deficit will peak at 4.3 percent of GDP in 2004 and diminish each year thereafter, reaching 0.9 percent in 2010 (*see Table 1-2 on page 4*). After that, primarily because of increased revenues from the scheduled expiration of the tax cuts enacted in the 2001 Economic Growth and Tax Relief Reconciliation Act (EGTRRA), the baseline deficit is projected to drop almost to zero in 2011 and then turn to surplus, rising to 1.2 percent of GDP in 2013.

Revenues

Under current law, total revenues are projected to fall slightly as a percentage of GDP next year—from 16.5 percent in 2003 to 16.2 percent—and then rise throughout the projection period, reaching 17.4 percent of GDP in 2005 and 18.7 percent in 2010. Revenues are projected to rise more rapidly thereafter because of the expiration of EGTRRA, equaling 20.5 percent of GDP by 2013. (The average level for the post-World War II period is 17.9 percent of GDP.)

Most of the change in projected revenues relative to GDP over the next decade results from individual and corporate income taxes. Other sources of revenue, such as social insurance taxes, are projected to grow at about the same rate as GDP.

Individual Income Taxes. CBO projects that receipts from individual income taxes will decline in 2004 for the fourth year in a row. For the next several years after that, by contrast, they produce most of the projected growth in federal revenues. Individual income taxes are the largest source of federal revenue, accounting for almost half of the total over the 2004-2013 projection period. They were responsible for most of the rise in revenues in the late 1990s and the decline in revenues in the past three years. (This year, total revenues are expected to be roughly 13 percent below their 2000 level.)

CBO projects that the factors that pushed down individual income tax receipts recently have largely played themselves out and that those receipts will begin rising again after 2004, both in nominal dollars and as a percentage of GDP. As a share of GDP, individual receipts are projected

to bottom out at less than 7 percent next year and then climb steadily to about 9 percent by 2010. Thereafter, the expiration of the EGTRRA tax cuts pushes projected individual receipts up significantly, to almost 11 percent of GDP by 2013.

Other than changes from legislation, the principal factor expected to boost receipts after 2004 is an increase in effective tax rates. That increase has three main causes. First, as total real (inflation-adjusted) income grows, more income will be pushed into higher tax brackets, a change known as real bracket creep. Second, the alternative minimum tax (AMT)—a parallel income tax system with fewer exemptions, deductions, and rates than the regular income tax—will affect more and more taxpayers in the future, in part because, unlike the regular tax, its exemption amount and brackets are not indexed for inflation. The AMT is expected to account for about 1 percent of individual tax receipts this year, a proportion that is projected to rise to about 8 percent by 2010 before falling back to about 3 percent immediately after expiration of the EGTRRA tax cuts. Third, taxable distributions from tax-deferred retirement accounts, such as individual retirement accounts (IRAs), are expected to increase as the population ages and taxpayers draw down those accounts.⁶

Corporate Income Tax Receipts. Corporate receipts are also expected to contribute to the rise in revenues as a percentage of GDP, but only through 2006. This year, they are projected to measure about 1.2 percent of GDP, their lowest share since 1983. However, corporate tax receipts are expected to rise sharply over the next two years, reaching 1.9 percent of GDP in 2005 and then peaking at 2.1 percent in 2006. Thereafter, they are projected to slip slightly as a share of GDP, falling to 1.8 percent after 2009.

CBO's projection of corporate receipts for the next 10 years reflects a combination of recovery from the recession, the effects of recent changes to the tax laws governing depreciation, and the longer-term relationship between

6. CBO's revenue forecasts have long reflected those three factors; however, the 2001 tax cuts exposed more taxpayers to the AMT, and the onset of retirement by baby boomers in the second half of the 10-year projection period makes IRA withdrawals a more prominent aspect of the projections.

the growth of corporate profits and the growth of GDP. Profits as a share of GDP (calculated to exclude the effects of the changes to depreciation) are projected to rise sharply in 2004 and 2005 as the economy grows more quickly. Also, the relationship between corporate tax receipts and profits is expected to return to more-historical norms.

The pattern of corporate receipts is also affected by provisions of the Job Creation and Worker Assistance Act of 2002 and JGTRRA that allow firms to deduct a substantial portion of qualifying investment in the year of purchase. Those partial-expensing provisions reduced corporate receipts in 2002 and 2003 and are projected to do so again next year. However, they expire for most investment undertaken after 2004, contributing to a steep increase in projected revenues in later years.

As investment recovers from its recent weakness, corporate depreciation deductions will claim a larger share of total corporate earnings, and corporate profits are likely to fall as a share of GDP. Consequently, receipts from corporate income taxes are projected to decline as a percentage of GDP after 2006.

Social Insurance and Other Tax Receipts. Social insurance receipts and other sources of revenue are generally expected to grow at the same rate as GDP over the next 10 years. Social insurance tax receipts, unlike income tax receipts, have been relatively stable as a percentage of GDP in recent years. Their main tax base—wages and salaries below a taxable maximum amount—has been much less volatile than corporate profits, capital gains, the income growth of high-income taxpayers, and other factors that have affected income taxes in recent years. CBO projects that social insurance receipts will hover between 6.6 percent and 6.7 percent of GDP each year from 2003 onward.

Other revenue sources are relatively small, together measuring a bit more than 1 percent of GDP. Excise taxes are expected to decline slightly as a share of GDP—from 0.6 percent in 2003 to 0.5 percent in 2013—because most excises are levied per unit of good or transaction rather than as a percentage of value. Estate and gift taxes are also expected to decline slightly over the next decade as a share of GDP, because of changes legislated in EGTRRA that increase the amounts exempt from the estate tax, reduce the tax rate, and then, in 2010, repeal the tax completely.

However, the estate tax is scheduled to return after 2010 as it existed before EGTRRA, and receipts from estate and gift taxes as a share of GDP are projected to rebound to near their 2000 level.

Outlays

Under current laws and policies, total outlays as a share of GDP are projected to decline gradually over the next 10 years—from 20.5 percent in 2004 to 19.3 percent in 2013 (*see Table 1-2 on page 4*). Although mandatory spending grows at roughly the same rate as GDP in the baseline, discretionary spending is assumed to grow at the rate of inflation and thus more slowly than GDP. Net interest spending is projected to rise in response to continued deficits—growing from 1.4 percent of GDP in 2004 to a peak of 2.1 percent in 2009. As baseline deficits turn into surpluses at the end of the projection period, net interest declines to 1.7 percent of GDP by 2013.

Discretionary Spending. According to the Balanced Budget and Emergency Deficit Control Act of 1985, CBO's baseline must assume that discretionary spending will continue at the current level (\$846 billion in budget authority for 2003), with annual increases based on two projected rates of inflation: the GDP deflator and the employment cost index for wages and salaries. Thus, the baseline assumes that discretionary budget authority will total \$872 billion in 2004 and rise at an average annual rate of 2.7 percent thereafter (*see Table 1-3*). The 2003 base amount for that projection includes \$80 billion in supplemental appropriations, mostly for the war in Iraq. Nevertheless, baseline discretionary outlays over the 2004-2013 period average 7.1 percent of GDP, less than the 7.5 percent average seen during the 1990s. (The budgetary effects of alternative assumptions about growth in discretionary spending are discussed in the next section.)

Because of the nation's continuing focus on homeland security, the Administration has attempted to provide additional detail by identifying the subset of spending that relates to homeland security. In its current baseline, CBO has adopted the Administration's classification for such spending (defined in Table 1-3). Discretionary outlays for homeland security are estimated to total about \$32 billion this year—almost \$11 billion for the Department of Defense and over \$21 billion for other agencies. (In addition, roughly \$1 billion in outlays classified as home-

Table 1-3.**CBO's Projections of Discretionary Spending and Homeland Security Spending**
(In billions of dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Total Discretionary Spending in CBO's Baseline^a													
Budget Authority													
Defense	455	465	476	488	500	514	527	541	556	571	587	2,442	5,226
Nondefense	<u>391</u>	<u>407</u>	<u>416</u>	<u>427</u>	<u>437</u>	<u>449</u>	<u>462</u>	<u>474</u>	<u>487</u>	<u>500</u>	<u>514</u>	<u>2,136</u>	<u>4,573</u>
Total	846	872	892	914	938	963	989	1,015	1,044	1,071	1,101	4,579	9,799
Outlays													
Defense	407	452	472	481	489	506	519	533	552	558	578	2,400	5,140
Nondefense	<u>419</u>	<u>448</u>	<u>460</u>	<u>467</u>	<u>479</u>	<u>491</u>	<u>502</u>	<u>515</u>	<u>528</u>	<u>542</u>	<u>556</u>	<u>2,345</u>	<u>4,988</u>
Total	826	900	931	948	969	996	1,022	1,048	1,080	1,100	1,134	4,745	10,128
Discretionary Spending Classified as Homeland Security Spending^b													
Budget Authority													
Defense	12	12	12	13	13	13	14	14	14	15	15	63	135
Nondefense	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>29</u>	<u>30</u>	<u>31</u>	<u>32</u>	<u>33</u>	<u>34</u>	<u>35</u>	<u>143</u>	<u>309</u>
Total	38	39	40	41	42	44	45	46	47	49	50	206	444
Outlays													
Defense	11	12	12	12	13	13	13	14	14	15	15	62	133
Nondefense	<u>22</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	<u>32</u>	<u>33</u>	<u>34</u>	<u>35</u>	<u>141</u>	<u>305</u>
Total	32	38	40	41	42	43	44	46	47	48	50	203	438

Source: Congressional Budget Office.

Note: Discretionary outlays are usually higher than budget authority because of spending from the Highway Trust Fund and the Airport and Airway Trust Fund, which is subject to obligation limitations set in appropriation acts. The budget authority for such programs is provided in authorizing legislation and is not considered discretionary.

- a. CBO's baseline assumes that discretionary spending grows at the rate of inflation after 2003. Inflation is projected using the inflators specified in the Balanced Budget and Emergency Deficit Control Act of 1985 (the GDP deflator and the employment cost index for wages and salaries).
- b. This classification includes much of the funding associated with the Department of Homeland Security, as well as funding for homeland security activities performed by other federal agencies, such as the Departments of Justice, Health and Human Services, and Energy. Funding for certain activities of the Department of Homeland Security, such as maritime safety and immigration services, is not included because those activities are not part of the Administration's definition of homeland security. For a complete discussion of the Administration's definition of homeland security, see Office of Management and Budget, *Annual Report to Congress on Combating Terrorism* (June 2002), available at www.whitehouse.gov/omb/legislative/combating_terrorism06-2002.pdf. In addition, the Administration's definition includes roughly \$1 billion of mandatory spending each year.

land security spending falls on the mandatory side of the budget). Under its baseline assumptions, CBO projects that discretionary outlays for homeland security will average about 0.3 percent of GDP over the next 10 years.

Mandatory Spending. Outlays for mandatory programs are generally determined by eligibility rules and benefit

levels set in law rather than through the annual appropriation process. CBO estimates that under current law, those outlays (excluding offsetting receipts) will grow at an average annual rate of 5.2 percent through 2013. That growth is fueled by spending for Social Security, Medicare, and Medicaid, which together account for more than three-quarters of mandatory outlays (see Table 1-4).

Table 1-4.**CBO's Baseline Projections of Mandatory Spending, Including Offsetting Receipts**

(In billions of dollars)

	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Means-Tested Programs														
Medicaid	148	162	175	181	195	213	231	251	274	298	324	353	996	2,495
Supplemental Security Income	31	32	33	38	36	35	40	41	43	49	43	49	182	407
Earned Income and Child Tax Credits	33	38	40	44	41	40	40	40	41	44	31	31	204	391
Food Stamps	22	25	26	26	26	27	27	28	29	30	30	31	132	280
Family Support ^a	26	28	26	25	25	25	25	25	26	26	26	27	127	258
Child Nutrition	10	11	11	11	12	12	13	13	14	14	15	16	59	132
Foster Care	6	6	7	7	7	7	8	8	9	9	9	10	36	80
Student Loans	4	9	3	4	5	6	6	6	7	7	7	7	25	59
State Children's Health Insurance	4	4	5	5	5	5	5	5	5	5	6	6	26	53
Veterans' Pensions	<u>3</u>	<u>3</u>	<u>3</u>	<u>4</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>4</u>	<u>17</u>	<u>37</u>
Total	287	319	330	345	357	374	399	423	450	485	496	533	1,805	4,192
Non-Means-Tested Programs														
Social Security	452	471	491	512	537	566	597	632	669	710	755	804	2,703	6,274
Medicare ^b	<u>254</u>	<u>274</u>	<u>288</u>	<u>307</u>	<u>319</u>	<u>342</u>	<u>366</u>	<u>392</u>	<u>420</u>	<u>455</u>	<u>481</u>	<u>523</u>	<u>1,622</u>	<u>3,894</u>
Subtotal	706	745	779	819	856	908	963	1,024	1,090	1,165	1,237	1,327	4,325	10,168
Other Retirement and Disability														
Federal civilian ^c	56	58	61	64	67	70	73	77	81	84	88	92	335	758
Military	35	36	37	38	39	40	41	42	43	44	45	46	194	415
Other	<u>5</u>	<u>6</u>	<u>6</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>	<u>8</u>	<u>8</u>	<u>9</u>	<u>9</u>	<u>9</u>	<u>35</u>	<u>77</u>
Subtotal	96	99	104	108	113	117	122	127	132	137	142	148	564	1,250
Unemployment Compensation	51	56	52	45	44	44	46	47	49	51	52	54	231	484
Other Programs														
Veterans' benefits ^d	25	29	32	36	35	33	36	36	37	40	36	39	171	360
Commodity Credit Corporation Fund	14	16	17	17	17	16	15	15	15	14	13	13	81	152
TRICARE for Life	0	4	5	6	7	7	8	9	9	10	11	11	34	83
Universal Service Fund	5	6	6	6	6	7	7	7	7	7	7	7	32	67
Social services	5	5	5	5	5	5	5	5	5	5	5	5	24	49
Other	<u>7</u>	<u>10</u>	<u>22</u>	<u>18</u>	<u>14</u>	<u>12</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>10</u>	<u>9</u>	<u>9</u>	<u>76</u>	<u>124</u>
Subtotal	56	69	86	89	84	79	81	82	83	86	82	85	418	836
Total	908	969	1,022	1,060	1,097	1,149	1,211	1,280	1,354	1,439	1,513	1,615	5,538	12,738
Offsetting Receipts														
Offsetting Receipts	-90	-100	-101	-116	-121	-122	-128	-132	-139	-147	-155	-164	-588	-1,326
Total														
Mandatory Spending	1,105	1,188	1,250	1,289	1,333	1,401	1,482	1,570	1,665	1,776	1,854	1,984	6,755	15,603
Memorandum:														
Mandatory Spending Excluding Offsetting Receipts	1,195	1,288	1,352	1,405	1,454	1,523	1,610	1,702	1,804	1,924	2,009	2,148	7,343	16,929

Source: Congressional Budget Office.

Note: Spending for the benefit programs shown above generally excludes administrative costs, which are discretionary.

- Includes Temporary Assistance for Needy Families and various programs that involve payments to states for child support enforcement and family support, child care entitlements, and research to benefit children.
- Excludes offsetting receipts.
- Includes Civil Service, Foreign Service, Coast Guard, and other small retirement programs and annuitants' health benefits.
- Includes veterans' compensation, readjustment benefits, life insurance, and housing programs.

Table 1-5.**CBO's Baseline Projections of Federal Interest and Debt**

(In billions of dollars)

	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Net Interest Outlays														
Interest on the Public Debt (Gross interest) ^a	333	322	318	356	409	463	510	549	583	611	633	647	2,057	5,080
Interest Received by Trust Funds														
Social Security	-77	-84	-87	-93	-102	-114	-128	-142	-157	-173	-190	-208	-524	-1,395
Other trust funds ^b	-76	-73	-66	-69	-74	-78	-82	-87	-91	-96	-101	-106	-369	-848
Subtotal	-153	-157	-153	-162	-176	-192	-210	-229	-248	-269	-291	-314	-893	-2,244
Other Interest ^c	-8	-8	-10	-11	-13	-15	-17	-19	-21	-23	-25	-28	-65	-182
Other Investment Income ^d	0	*	*	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-7
Total (Net interest)	171	157	155	184	220	255	282	301	312	318	316	305	1,096	2,648
Federal Debt (At end of year)														
Debt Held by the Public	3,540	3,986	4,443	4,790	5,027	5,242	5,450	5,631	5,784	5,800	5,645	5,438	n.a.	n.a.
Debt Held by Government Accounts														
Social Security	1,329	1,486	1,650	1,828	2,025	2,241	2,475	2,727	2,996	3,281	3,580	3,891	n.a.	n.a.
Other government accounts ^b	1,329	1,367	1,436	1,523	1,627	1,739	1,856	1,978	2,104	2,235	2,373	2,513	n.a.	n.a.
Total	2,658	2,852	3,085	3,352	3,653	3,980	4,331	4,705	5,100	5,516	5,953	6,404	n.a.	n.a.
Gross Federal Debt	6,198	6,838	7,528	8,142	8,679	9,222	9,782	10,335	10,884	11,316	11,598	11,842	n.a.	n.a.
Debt Subject to Limit ^e	6,161	6,801	7,491	8,105	8,642	9,185	9,744	10,297	10,845	11,277	11,559	11,803	n.a.	n.a.
Federal Debt as a Percentage of GDP														
Debt Held by the Public	34.2	37.1	39.5	40.4	40.1	39.7	39.2	38.5	37.6	36.0	33.4	30.7	n.a.	n.a.

Source: Congressional Budget Office.

Note: * = between -\$500 million and zero; n.a. = not applicable.

a. Excludes interest costs of debt issued by agencies other than the Treasury (primarily the Tennessee Valley Authority).

b. Principally Civil Service Retirement, Military Retirement, Medicare, and Unemployment Insurance.

c. Primarily interest on loans to the public.

d. Earnings on private investments by the Railroad Retirement Board.

e. Differs from gross federal debt primarily because most debt issued by agencies other than the Treasury is excluded from the debt limit. The current debt limit is \$7,384 billion.

Ten-year averages, however, do not fully reveal the long-term trends propelling the growth in outlays for those programs. As baby boomers begin to qualify for Social Security and Medicare in the second half of this decade, the growth in spending for those programs will accelerate. For example, outlays for Social Security are projected to increase at an average annual rate of 4.9 percent from 2004 through 2008; however, that rate rises to 6.1 percent from 2009 through 2013. The same pattern can be seen for

Medicare spending (excluding offsetting receipts), although with higher growth rates. CBO projects that over the next five years, Medicare outlays will increase at an average rate of 6.0 percent a year, rising to 7.4 percent in the following five years. Unlike Social Security and Medicare, Medicaid is projected to see fairly constant growth over the 10-year projection period. That growth is faster than for the other two programs, however, ranging between 8 percent and 9 percent in almost every year.

Box 1-1.**The Statutory Debt Limit**

The Treasury's authority to issue debt is restricted by a statutory limit set by the Congress, which covers both debt held by the public and the nonmarketable Treasury securities issued to government accounts. On February 20, 2003, the Treasury bumped up against the previous debt ceiling, which stood at \$6.4 trillion. From that time until May 27, when the current debt limit of \$7.384 trillion was enacted in Public Law 108-24, the Treasury used several accounting measures to clear room under the ceiling so it could continue to raise cash to finance government activities. Those measures—most of which had been used in previous debt-limit impasses—included suspending the issuance of certain securities held in the Thrift Savings Plan (a retirement savings and investment plan for federal employees), withdrawing compensating balances held at private banks, and suspending investments in the Civil Service Retirement Fund.

CBO estimates that under current policies, the present debt limit may be reached sometime in the last quarter of fiscal year 2004. If a new ceiling has not been enacted by then, the Treasury will be forced to resort to similar accounting measures to finance its payments and stay under the ceiling. In the most recent debt-limit crises, such accounting measures have bought the Treasury enough room to remain below the limit for more than three months.

Overall, mandatory spending (excluding offsetting receipts) is projected to decline as a percentage of GDP through 2007 and then accelerate in the latter part of the projection period, reaching 12.1 percent of GDP in 2013. Spending for Social Security, Medicare, and Medicaid combined is projected to grow from 8.5 percent of GDP in 2004 to 9.5 percent in 2013, at which point it will make up nearly half of total federal spending under current law. CBO estimates that spending for Medicare and Medicaid together will grow from 4.1 percent to 4.9 percent of GDP over that period, while Social Security will rise slightly (from 4.4 percent to 4.5 percent), and other mandatory programs will decline as a share of GDP.

Net Interest. Interest costs—mainly on accumulated federal debt—remain a sizable portion of the budget, even though they have been shrinking for the past five years. Outlays for net interest are projected to bottom out at \$155 billion next year and then rise steadily, reflecting projected increases both in interest rates and in federal borrowing (see *Table 1-5*). Under CBO's baseline assumptions, net interest will peak as a percentage of GDP at 2.1 percent in 2009 (about the same as in 2001) and then decline through 2013. (For information about the limits on federal borrowing, see *Box 1-1*.)

Budget Projections Under Alternative Scenarios

Just as legislation enacted in the past few years has had a major impact on the paths of federal spending and revenues, future legislation will undoubtedly affect the budget outlook in significant ways. To illustrate the potential effect on the baseline of different fiscal policies, *Table 1-6* presents CBO's estimates of the budgetary impact of several possible legislative actions. The full impact of such actions would also include debt-service differences (changes in projected interest payments resulting from changes in the government's projected borrowing needs).

CBO's baseline projection of revenues rests on the assumption that current tax laws remain unaltered.⁷ Therefore, CBO assumes that tax provisions scheduled to expire will actually do so. For example, CBO's baseline envisions that major provisions of EGTRRA—such as the introduction of the 10 percent tax bracket, decreases in previously existing tax rates for individuals, increases in the child tax credit, and the repeal of the estate tax—will expire as scheduled at the end of 2010. Since most expiring tax provisions reduce receipts, projections that assume the extension of those provisions show lower revenues than the baseline does. If all expiring tax provisions (except those related to the exemption amount for the alternative minimum tax) were extended, revenues would

7. The sole exception involves excise taxes dedicated to trust funds, which, under budget rules, are included in the revenue projections whether or not they are scheduled to expire.

Table 1-6.**The Budgetary Effects of Policy Alternatives Not Included in CBO's Baseline**

(In billions of dollars)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Policy Alternatives That Increase the Deficit or Reduce the Surplus^a												
Extend Expiring Tax Provisions ^b	3	-59	-113	-116	-109	-110	-108	-242	-349	-361	-393	-1,564
Reform the Alternative Minimum Tax ^c	0	-8	-24	-34	-46	-60	-74	-64	-40	-49	-112	-400
Reform Medicare, Including Adding a Prescription Drug Benefit, at the Level Assumed in the Budget Resolution	-7	-10	-33	-38	-43	-46	-50	-53	-56	-64	-131	-400
Increase Discretionary Appropriations by the Growth Rate of Nominal GDP After 2003	-12	-35	-62	-91	-121	-151	-182	-213	-245	-279	-322	-1,392
Increase Discretionary Appropriations by 7.7 Percent a Year After 2003 ^d	-26	-68	-116	-170	-228	-292	-361	-438	-521	-612	-608	-2,832
Policy Alternatives That Reduce the Deficit or Increase the Surplus												
Increase Discretionary Appropriations, Excluding Some Supplemental Appropriations for 2003, by the Rate of Inflation After 2003 ^e	37	68	79	83	86	88	91	94	95	98	353	818
Freeze Total Discretionary Appropriations at the 2003 Level (\$846 billion)	16	35	56	79	104	130	158	187	214	245	289	1,223
Memorandum:												
Total Deficit (-) or Surplus in CBO's August 2003 Baseline	-480	-341	-225	-203	-197	-170	-145	-9	161	211	-1,445	-1,397

(Continued)

be a total of nearly \$1.6 trillion lower during the 2004-2013 period.⁸

Another potential impact on revenues involves modifying the alternative minimum tax. As noted earlier, the impact of the AMT will grow in coming years as more taxpayers become subject to it (many of whom were not the intended target of the tax when it was enacted). If the AMT

was indexed for inflation after 2004, federal revenues would be \$400 billion lower over the next 10 years, according to the Joint Committee on Taxation (JCT).⁹

8. Before 2011, the largest contributor to the cost of extending those expiring provisions is partial expensing for businesses. Other contributors include the child tax credit, the 10 percent tax bracket, and the research and experimentation tax credit.

9. The estimate assumes that the exemption amount for the AMT, which was increased through 2004 in JGTRRA, is extended at its higher level and, together with the AMT tax brackets, is indexed for inflation after 2004. In addition, if that change was enacted jointly with the extension of expiring tax provisions, an interaction effect would occur, causing an added revenue loss of about \$184 billion over the 10-year period.

Table 1-6.**Continued**

(In billions of dollars)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Memorandum (Continued):												
Debt-Service Cost on Differences from CBO's Baseline^a												
Extend expiring tax provisions	*	-1	-5	-12	-19	-26	-33	-45	-63	-86	-36	-289
Reform the alternative minimum tax	0	*	-1	-3	-5	-8	-12	-17	-20	-24	-8	-89
Reform Medicare and add a prescription drug benefit	*	*	-1	-4	-6	-9	-12	-15	-19	-24	-12	-91
Increase discretionary appropriations by the growth rate of nominal GDP	*	-1	-3	-8	-14	-23	-33	-46	-61	-78	-27	-267
Increase discretionary appropriations by 7.7 percent	*	-2	-7	-15	-27	-43	-63	-88	-119	-157	-51	-522
Increase discretionary appropriations, excluding supplemental, for inflation	*	2	6	11	17	23	29	36	43	51	38	220
Freeze discretionary appropriations at the 2003 level	*	1	3	7	13	20	29	40	53	69	25	237

Sources: Congressional Budget Office; Joint Committee on Taxation.

Note: * = between -\$500 million and \$500 million.

- Negative amounts indicate an increase in the deficit or a reduction in the surplus.
- This estimate does not include the effects of extending the increased exemption amount for the alternative minimum tax, which expires in 2004. See the policy alternative for the alternative minimum tax.
- This alternative assumes that the exemption amount for the alternative minimum tax (AMT), which was increased through 2004 in the Jobs and Growth Tax Relief Reconciliation Act of 2003, is extended at its higher level and, together with the AMT tax brackets, is indexed for inflation after 2004. The estimates are shown relative to current law. If this alternative was enacted jointly with the extension of expiring tax provisions, an interaction effect would occur that would make the combined revenue loss greater than the sum of the two separate estimates by about \$184 billion (plus nearly \$20 billion in debt service) over the 2004-2013 period.
- The 7.7 percent rate of growth is the historical average from 1998 through 2003, excluding \$79 billion in supplemental appropriations for 2003 enacted in April. In this alternative, however, those supplemental appropriations are included in total budget authority for 2003 and are extended through 2013.
- The Emergency Wartime Supplemental Appropriations Act, 2003 (P.L. 108-11), provided \$79 billion of budget authority for 2003. This alternative does not extend those appropriations beyond 2003 but includes the outlays resulting from them.

On the spending side of the budget, legislation that has passed both Houses of Congress would make a number of changes to the Medicare program, including providing a prescription drug benefit for most enrollees. If legislation is enacted that matches the amount allocated in this year's budget resolution, the initiative will cost \$400 billion over the next decade.¹⁰

Assumptions about the future path of discretionary spending can also have a significant effect on the budget

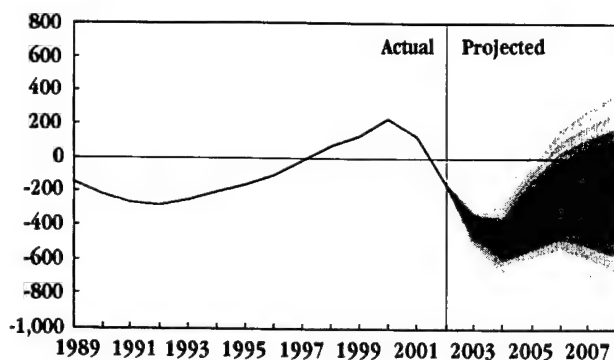
outlook. In CBO's baseline, budget authority for discretionary programs is inflated from the level appropriated for the current year, as specified by the Deficit Control Act. For comparison, CBO estimated the budgetary impact of four other assumptions about future discretionary spending, two of which would worsen the budget outlook and two of which would improve it. Assuming that appropriations will increase at the same rate as nominal GDP through 2013 adds \$1.4 trillion to projected discretionary spending. Assuming that appropriations will rise by 7.7 percent a year—the average growth rate from 1998 through 2003 (excluding \$79 billion in supple-

10. See section 401 of the Concurrent Resolution on the Budget for Fiscal Year 2004 (H. Con. Res. 95).

Figure 1-2.

Uncertainty of CBO's Projections of the Total Deficit or Surplus Under Current Policies

(Deficit (-) or surplus in billions of dollars)



Source: Congressional Budget Office.

Note: This figure, calculated on the basis of CBO's forecasting track record, shows the estimated likelihood of alternative projections of the budget deficit or surplus under current policies. The baseline projections described in this chapter fall in the middle of the darkest area of the figure. Under the assumption that tax and spending policies will not change, the probability is 10 percent that actual deficits or surpluses will fall in the darkest area and 90 percent that they will fall within the whole shaded area.

The uncertainty bands are based on the projection errors in CBO's past winter baselines. Since the current baseline was prepared with more information than is typically available in January, the bands may overstate the uncertainty of the current projections, especially for this year.

Actual deficits or surpluses will be affected by legislation enacted in future years, including decisions about discretionary spending. The effects of future legislation are not reflected in this figure.

For an explanation of how CBO calculated the probability distribution underlying this figure, see Congressional Budget Office, *The Uncertainty of Budget Projections: A Discussion of Data and Methods* (April 2003).

mental appropriations for 2003)—boosts discretionary spending by \$2.8 trillion.¹¹

11. In both of those scenarios, supplemental appropriations are included in total budget authority for 2003 and extended through 2013.

In the other direction, excluding \$79 billion in supplemental appropriations for 2003 from projections for future years reduces discretionary outlays by \$0.8 trillion over 10 years. Assuming that appropriations are frozen at the current level through 2013, with no adjustment for inflation, has a larger effect: reducing cumulative discretionary spending by \$1.2 trillion.

In addition to policy changes, the budget is highly sensitive to the state of the economy and to technical assumptions about the impact of tax and spending policies. Consequently, the outlook for the budget can best be described not as a single row of numbers but as a large range of possible outcomes centered around those numbers, with the range widening as the projection period extends. Using the difference between past CBO baselines and actual budgetary results as a guide, *Figure 1-2* shows the estimated likelihood of alternative outcomes under current policies. The current baseline projection of the deficit falls in the middle of the highest-probability area, shown as the darkest part of the figure. But nearby projections—other paths in the darkest part of the figure—have nearly the same probability of occurring as the baseline projection does. Projections that are very different from the baseline also have a significant probability of coming to pass because of the uncertainty surrounding CBO's economic and technical assumptions.¹²

Changes to the Budget Outlook Since March

The budget outlook has deteriorated substantially since CBO issued its previous baseline projections in March.¹³ In that baseline, CBO estimated that under the laws and policies then in force, the deficit would total \$246 billion this year and \$200 billion in 2004 but that the 2004-2013 period would show a cumulative surplus of \$891 billion.

12. For more information about that figure, see Congressional Budget Office, *The Uncertainty of Budget Projections: A Discussion of Data and Methods* (April 2003).

13. Those projections were contained in Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 2004* (March 2003).

Today, under the laws and policies now in effect (and using updated economic and technical assumptions), CBO's estimate of this year's deficit has risen by \$155 billion, and its estimate of next year's deficit has grown by \$280 billion. For the 10-year period, the baseline budget outlook has worsened by a total of almost \$2.3 trillion (*see Table 1-7 on pages 16 and 17*).

When CBO revises its baseline projections, it divides the changes into three categories based on their cause: recently enacted legislation, changes to CBO's outlook for the economy, and other, so-called technical factors that affect the budget.¹⁴ More than two-thirds of the total change in this baseline is attributable to legislation (a cumulative \$1.6 trillion between 2004 and 2013). Technical changes worsen the bottom line by another \$0.7 trillion, and, on net, economic revisions have a relatively minor effect (totaling \$72 billion from 2004 through 2013).

CBO now anticipates \$122 billion less in revenues for 2003 than it did last March. Total revenues projected for the 2004-2013 period have fallen by \$878 billion, with the largest changes in 2004 and 2005. The effects of recent legislation, notably the Jobs and Growth Tax Relief Reconciliation Act of 2003, account for the majority of revisions to CBO's revenue projections for the next few years. After 2005, technical changes explain most of the drop in revenues relative to the March baseline.

14. That categorization of revisions should be interpreted with caution. For example, legislative changes represent CBO's best estimates of the future effects of laws enacted since the previous baseline. If a new law proves to have different effects from the effects in CBO's initial estimate, those differences will appear as technical changes (not legislative ones) in later revisions to the baseline. The distinction between economic and technical revisions is similarly imprecise. CBO classifies economic changes as ones that result directly from changes in the components of CBO's economic forecast. Changes in other factors related to the performance of the economy—such as the amount of capital gains realizations—are classified as technical revisions.

Spending this year is projected to be \$33 billion higher than CBO anticipated in March, and outlay projections for the 10-year period are a total of \$1.4 trillion higher, largely because of laws enacted since March. However, the requirement to extend both of the recent supplemental appropriation acts over the 2004-2013 period in the baseline accounts for \$873 billion of that total. Additional debt-service costs resulting from both tax and spending legislation account for most of the rest.

The Effects of Recent Legislation

Laws enacted in the past five months are responsible for nearly two-thirds of the increase in the projected 2003 deficit and for an even larger share—roughly 70 percent—of the increase in the projected 10-year deficit. One of the most significant of those laws from a budgetary perspective is JGTRRA, which is estimated to increase the deficit by \$62 billion this year and by \$288 billion over the 2004-2013 period, mainly by reducing revenues (*see Table 1-8 on page 18*).

Revenues. Some of the main provisions of JGTRRA accelerate tax changes that were previously enacted. The law brings forward to this year cuts in tax rates previously scheduled for 2004 and 2006 (as enacted in EGTRRA) and accelerates the expansion of the 10 percent tax bracket. It also expands the 15 percent individual tax bracket and increases the standard deduction for married couples to address concerns about the so-called marriage penalty. All of those changes, except the cuts in tax rates, are scheduled to expire at the end of 2004. Altogether, the provisions that accelerate prior changes are estimated by CBO and the JCT to reduce receipts and increase outlays by \$16 billion in 2003 and a total of \$105 billion thereafter.

JGTRRA also increases the child tax credit this year and next year from \$600 per child to \$1,000. After that, the credit is scheduled to equal \$700 from 2005 through 2008, \$800 in 2009, and \$1,000 in 2010. The changes to the credit contained in JGTRRA are estimated to lower revenues and raise spending by \$14 billion in 2003—which represents advance refunds paid in July and

Table 1-7.**Changes in CBO's Baseline Projections of the Deficit or Surplus Since March 2003**
(In billions of dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Total Deficit (-) or Surplus as Projected in March 2003	-246	-200	-123	-57	-9	27	61	96	231	405	459	-362	891
Changes to Revenue Projections													
Legislative	-53	-135	-77	-20	-13	-17	-11	-4	4	2	2	-263	-270
Economic	-16	-13	-12	-12	-15	-17	-19	-23	-20	-12	-8	-70	-151
Technical	<u>-53</u>	<u>-51</u>	<u>-51</u>	<u>-51</u>	<u>-55</u>	<u>-50</u>	<u>-45</u>	<u>-41</u>	<u>-39</u>	<u>-40</u>	<u>-34</u>	<u>-258</u>	<u>-457</u>
Total Revenue Changes	-122	-199	-141	-84	-83	-83	-75	-69	-54	-50	-40	-591	-878
Changes to Outlay Projections													
Legislative													
Discretionary													
Defense	27	54	62	65	66	68	70	72	74	75	77	315	683
Nondefense	<u>6</u>	<u>14</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>19</u>	<u>20</u>	<u>20</u>	<u>21</u>	<u>21</u>	<u>22</u>	<u>87</u>	<u>190</u>
Subtotal, discretionary	33	68	79	83	85	87	90	92	95	96	99	402	873
Mandatory													
Unemployment insurance	3	5	*	0	0	0	0	0	0	0	0	5	5
Jobs and Growth Tax Relief Reconciliation Act	9	12	5	*	*	*	*	0	0	0	0	17	17
Other	<u>*</u>	<u>2</u>	<u>4</u>	<u>1</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>7</u>	<u>8</u>
Subtotal, mandatory	12	19	9	1	*	*	*	*	*	*	*	29	30
Net interest (Debt service)	<u>*</u>	<u>-5</u>	<u>13</u>	<u>22</u>	<u>32</u>	<u>41</u>	<u>50</u>	<u>59</u>	<u>67</u>	<u>76</u>	<u>85</u>	<u>113</u>	<u>450</u>
Subtotal, legislative changes	46	92	101	105	117	129	140	150	162	172	184	544	1,352
Economic													
Discretionary	0	*	-2	-3	-4	-4	-5	-6	-7	-8	-8	-14	-48
Mandatory													
Social Security	0	-1	-2	-2	-3	-4	-5	-6	-7	-8	-10	-11	-47
Medicaid	*	*	*	-1	-2	-2	-3	-4	-5	-6	-7	-6	-30
Earned income and child tax credits	1	1	1	1	1	1	1	1	2	1	2	7	14
Unemployment insurance	2	5	3	2	*	1	*	*	*	*	*	10	9
Other	<u>-1</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>-1</u>	<u>*</u>	<u>-3</u>
Subtotal, mandatory	2	5	1	*	-3	-4	-7	-9	-11	-14	-17	-1	-57
Net interest													
Rate effect	-2	-17	-31	-30	-17	-7	-3	-1	-1	-1	*	-101	-106
Debt service	<u>*</u>	<u>*</u>	<u>*</u>	<u>-1</u>	<u>-1</u>	<u>-2</u>	<u>-2</u>	<u>-1</u>	<u>-1</u>	<u>-2</u>	<u>-2</u>	<u>-3</u>	<u>-11</u>
Subtotal, net interest	-2	-16	-30	-31	-18	-8	-4	-2	-2	-2	-3	-104	-117
Subtotal, economic changes	*	-12	-31	-34	-25	-16	-16	-17	-20	-24	-28	-118	-223

(Continued)

Table 1-7.**Continued**

(In billions of dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Changes to Outlay Projections (Continued)													
Technical													
Discretionary	-12	-5	*	1	2	2	2	1	1	*	*	1	4
Mandatory													
Social Security	-2	-3	*	*	1	3	4	5	6	8	9	1	33
Unemployment insurance	-6	-3	*	*	*	*	*	*	*	*	*	-4	-4
Other	<u>5</u>	<u>9</u>	<u>2</u>	<u>*</u>	<u>-1</u>	<u>-1</u>	<u>-2</u>	<u>-2</u>	<u>-1</u>	<u>-2</u>	<u>-2</u>	<u>10</u>	<u>*</u>
Subtotal, mandatory	-3	3	2	*	*	1	2	3	5	6	7	6	29
Net interest													
Debt service	*	*	3	7	9	14	19	25	29	34	39	32	178
Other	<u>3</u>	<u>3</u>	<u>2</u>	<u>5</u>	<u>8</u>	<u>10</u>	<u>10</u>	<u>9</u>	<u>8</u>	<u>7</u>	<u>6</u>	<u>28</u>	<u>68</u>
Subtotal, net interest	3	3	4	11	17	24	29	34	38	41	44	59	246
Subtotal, technical changes	<u>-13</u>	<u>1</u>	<u>6</u>	<u>12</u>	<u>19</u>	<u>27</u>	<u>33</u>	<u>39</u>	<u>44</u>	<u>47</u>	<u>51</u>	<u>66</u>	<u>280</u>
Total Outlay Changes	33	81	77	84	111	140	157	172	186	195	207	492	1,409
Total Impact on the Deficit or Surplus	-155	-280	-218	-168	-194	-223	-232	-240	-240	-245	-248	-1,083	-2,287
Total Deficit (-) or Surplus as Projected in August 2003	-401	-480	-341	-225	-203	-197	-170	-145	-9	161	211	-1,445	-1,397
Memorandum:													
Total Legislative Changes	-99	-227	-178	-126	-130	-146	-151	-155	-158	-169	-183	-808	-1,622
Total Economic Changes	-16	-1	18	21	10	*	-3	-6	*	11	21	48	72
Total Technical Changes	-40	-51	-58	-64	-74	-77	-78	-80	-82	-87	-86	-324	-737

Source: Congressional Budget Office.

Note: * = between -\$500 million and \$500 million.

August of the child credit—and by a total of \$19 billion over the following two years.¹⁵

15. Taxpayers without tax liability but with a certain amount of income can receive child credits in the form of government payments, which are classified as refundable outlays in the federal budget. The original estimates of JGTRRA produced by the Joint Committee on Taxation counted \$3.6 billion of those advance refunds in 2003 as outlays because they went to taxpayers who did not have recent tax liability. The Office of Management and Budget and the Treasury Department have indicated that they will classify all of the advance refunds as reductions in revenues. Although CBO believes that some of the advance refunds should be classified as

JGTRRA also alters individual income taxes by reducing tax rates on certain dividends and capital gains through 2008. Through 2007, the maximum rate falls to 15 percent, with a lower rate of 5 percent applying to taxpayers who are subject to the 10 percent tax rate on ordinary income. In 2008, the lower rate is scheduled to be replaced with complete tax exemption. At the end of that year, however, the reduced rates for dividends and capital gains

outlays, it is including all of the advance refunds as reductions in revenues in this report to reflect their actual treatment in the budget.

Table 1-8.**The Budgetary Effects of the Jobs and Growth Tax Relief Reconciliation Act of 2003**

(In billions of dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total, 2004- 2008	Total, 2004- 2013
Changes in Revenues													
Acceleration of Tax Rate and Bracket Changes													
Tax rates	-10	-39	-20	-6	0	0	0	0	0	0	0	-65	-65
Ten percent tax bracket	-2	-8	-2	0	0	0	0	0	0	0	0	-10	-10
Taxes on married couples	<u>-5</u>	<u>-25</u>	<u>-5</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>-30</u>	<u>-30</u>
Subtotal	-16	-72	-27	-6	0	0	0	0	0	0	0	-105	-105
Increase in Child Tax Credit	-14	-6	-13	0	0	0	0	0	0	0	0	-19	-19
Cut in Tax Rates on Dividends	-4	-18	-19	-20	-21	-23	-20	*	0	0	0	-101	-121
Cut in Tax Rates on Capital Gains	*	-1	-1	-3	-4	-4	1	-10	0	0	0	-13	-22
Increase in Exemption for Alternative Minimum Tax	-1	-10	-6	0	0	0	0	0	0	0	0	-17	-17
Enhanced Depreciation	-10	-33	-12	9	9	8	7	5	4	2	1	-18	1
Increase in Small-Business Expensing	-2	-3	-4	-1	3	2	1	1	1	*	*	-3	1
Change in Corporate Tax Payment Dates	<u>-6</u>	<u>6</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>6</u>
Total Change in Revenues and Outlays	-53	-136	-82	-21	-14	-17	-11	-4	4	3	2	-270	-277
Adjustment to Exclude Outlays for Refundable Tax Credits	<u>0</u>	<u>1</u>	<u>5</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>6</u>
Total Revenue Changes	-53	-135	-78	-21	-14	-17	-11	-4	4	3	2	-264	-271
Changes in Mandatory Outlays													
State Fiscal Relief	9	11	0	0	0	0	0	0	0	0	0	11	11
Outlays for Refundable Tax Credits	<u>0</u>	<u>1</u>	<u>5</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>6</u>	<u>6</u>
Total Outlay Changes	9	12	5	*	*	*	*	0	0	0	0	17	17
All Changes													
Net Increase in Budget Deficit	62	148	82	21	14	17	11	4	4	3	2	281	288

Sources: Congressional Budget Office; Joint Committee on Taxation.

Notes: * = between -\$500 million and \$500 million.

Separate estimates of the effects on revenues and outlays are not available for several provisions, including the reductions in income tax rates and the changes in the child tax credit.

are set to expire. The reduced rates on dividends will decrease revenues and boost outlays by \$4 billion this year and by \$121 billion through 2010, CBO and the JCT estimate, and the lower rates on capital gains will decrease receipts and increase spending by \$22 billion through 2010.

In addition, the law increases through 2004 the amount of individual income that is exempt from the alternative minimum tax. CBO and the JCT estimate that such an exemption will reduce revenues by \$1 billion this year and \$17 billion through 2005.

Besides altering the taxes that individuals pay, JGTRRA contains several provisions that affect businesses. Most significantly, the law provides for greater up-front depreciation deductions for qualifying investments. Specifically, it increases the share of equipment that can be expensed (deducted immediately) by all businesses from 30 percent to 50 percent and extends that partial expensing to investment undertaken through the end of calendar year 2004 (it had been scheduled to expire for investment undertaken after September 10, 2004). Those partial-expensing provisions are estimated to lower revenues by \$55 billion from 2003 through 2005. Although partial expensing accelerates deductions, it does not change the overall amount of deductions taken during the lifetime of an investment property. Therefore, businesses will take fewer deductions after 2004 on investment property put in service during 2003 and 2004, raising revenue in later years by an estimated \$46 billion from 2006 through 2013. Consequently, JGTRRA's depreciation provisions are estimated to reduce revenues by \$10 billion in 2003 and to be almost revenue-neutral over the 2004-2013 period.

In addition, JGTRRA increases the amount of investment undertaken by small businesses that can be fully expensed. That change is set to expire after 2005. The provision is estimated to decrease revenues by \$9 billion from 2003 through 2006 but, like partial expensing, to increase revenues later on.

JGTRRA also permits corporations to pay part of the estimated tax payments due on September 15, 2003, on October 1, 2003, instead. That provision causes an esti-

mated \$6 billion in revenues to shift from fiscal year 2003 into fiscal year 2004.

Discretionary Spending. The 2003 Emergency Wartime Supplemental Appropriations Act provided budget authority of \$79 billion for 2003. The bulk of that funding (\$62 billion) was provided for the war and subsequent occupation in Iraq, for ongoing operations in Afghanistan, and for activities abroad and at home associated with the global war on terrorism. CBO estimates that about \$14 billion of that budget authority will be spent in 2003 on military pay (arising from reservists' being called to duty, as well as from extra compensation paid to personnel serving in Iraq, Afghanistan, and other overseas locations) and that another \$13 billion will be spent this year to transport military personnel and equipment, purchase additional fuel and supplies, and pay other day-to-day costs of those operations.

The supplemental appropriation act also provided \$17 billion of nondefense budget authority—largely for international affairs programs (the Iraq Relief and Reconstruction Fund, the Economic Support Fund, military aid, and humanitarian assistance efforts), as well as for aid to law enforcement agencies, state and local assistance through the Department of Homeland Security's Office of Domestic Preparedness, and funding for the Transportation Security Administration. Outlays from those nondefense appropriations are estimated to rise by a total of \$6 billion in 2003.

Additionally, CBO's baseline incorporates the effects of the supplemental appropriation for disaster relief that was signed into law in August. Nearly \$1 billion was appropriated, but none of that money is expected to be spent this year.

As noted earlier, CBO's baseline projections are required to assume that annual appropriations for discretionary programs will continue at their current level with increases each year for projected inflation. Therefore, CBO has included (and inflated) both of those 2003 supplemental appropriations in each year of the baseline through 2013, which causes projections of discretionary outlays to rise by a total of \$873 billion for the 2004-2013 period.

Mandatory Spending. Legislation enacted since March has had a relatively small budgetary effect on mandatory programs. In May, the Congress and the President enacted the Unemployment Compensation Amendments of 2003, which further extended unemployment benefits until December 2003. That law will raise outlays by \$3 billion in 2003 and \$5 billion in 2004, CBO estimates.

Besides its numerous revenue provisions, the Jobs and Growth Tax Relief Reconciliation Act included \$10 billion in fiscal assistance to the states (\$5 billion for 2003 and \$5 billion for 2004). Those funds—administered by the Treasury and allocated to states on the basis of their population—are intended to help states with existing services and programs. In addition, JGTRRA temporarily raised federal matching rates for the Medicaid program, which CBO estimates will increase federal spending on Medicaid by almost \$4 billion in 2003 and by more than \$6 billion in 2004. Other provisions in JGTRRA—primarily the increase in the child tax credit for tax years 2003 and 2004—will boost outlays for refundable tax credits by \$1 billion in 2004 and \$5 billion in 2005. All told, JGTRRA is estimated to raise spending by \$17 billion over the 2004-2013 period (*see Table 1-8 on page 18*).

Net Interest. The other large change in outlays attributable to legislation involves debt service. CBO estimates that the total effect of all legislation enacted since March—accounting for both decreases in revenues and increases in outlays (excluding debt service)—is to raise this year's deficit by \$99 billion and the total deficit for the 2004-2013 period by nearly \$1.2 trillion. Those increases will require the government to undertake additional borrowing, which will boost debt-service costs by nearly \$450 billion from 2004 through 2013, CBO projects.

The Effects of Recent Economic Changes

Changes to the economic outlook since January (when CBO last updated its economic projections) have a relatively small but positive effect on the budget outlook for the 2004-2013 period. Lower projections of inflation for most of that period, as well as lower expectations for interest rates in the next few years, reduce projected outlays by a total of \$223 billion over 10 years relative to CBO's March baseline. On the other side of the ledger, lower projections of total wages and salaries, in part related to the lower projected inflation, contribute to a decrease in

revenue projections of \$151 billion over that period. The net effect of the economic changes is to reduce the projected 10-year deficit by \$72 billion. (For a description of CBO's new economic forecast, see Chapter 2.)

Revenues. About one-sixth of the total decline in revenue projections since March is attributable to changes in CBO's economic outlook. Such reductions total roughly \$10 billion to \$20 billion each year through 2013.

The most important factor in those reestimates is that CBO has lowered its projection of wage and salary disbursements by \$110 billion for calendar year 2003 and by similar amounts for each succeeding year through 2013.¹⁶ With employment reported by firms falling in recent months, and with average wages rising only slowly, growth in total wages and salaries has been sluggish this year. Bonus payments, which are most significant between December and February and are included in total wages and salaries, were weak this year. Such factors have caused CBO to reduce its revenue projections by \$28 billion for 2003 and by similar amounts for each of the following 10 years.

CBO has also revised its forecast for personal income from nonwage sources—proprietors' income, interest income, and personal dividends. It projects that such income will grow more quickly than anticipated in January and will end up about \$200 billion higher by 2013 than in the previous projection. However, much of that nonwage income, as measured in the national income and product accounts (NIPAs), is not earned in taxable form or is underreported by taxpayers. Thus, the higher projection for those sources of income does not fully offset the

16. Before releasing its March baseline, CBO had observed weakness in withheld tax receipts, which depend directly on the level of wage and salary disbursements. Thus, in March, CBO reduced its January baseline projection of 2003 receipts by \$30 billion. That change was considered a technical reestimate because it was too early to observe wages and salaries deviating from the January baseline projection. Since then, the Bureau of Economic Analysis has provided more up-to-date information on wage and salary disbursements in the national income and product accounts, confirming that those sources of income are growing more slowly than CBO expected in January.

revenue loss resulting from the lower projection for wages and salaries.

CBO's revised forecast of corporate profits (calculated to exclude the effects of JGTRRA on depreciation) has increased revenue projections by about \$10 billion for 2003 and about \$20 billion per year for 2004 through 2006. Thereafter, CBO projects that profits will return roughly to the amounts projected in the January baseline. Thus, revisions to revenue projections resulting from changes in the outlook for corporate profits are relatively small after 2007.

Discretionary Spending. By law, CBO is required to project future discretionary budget authority using a mix of two measures of inflation: the GDP deflator and the employment cost index for wages and salaries (ECI). Although CBO's projection of the ECI for 2004 has risen since January, its projection of the GDP deflator for that year has fallen. For the rest of the projection period, the outlook for both measures of inflation is lower than or the same as in the January baseline. As a result, projections of discretionary outlays have declined by a total of \$48 billion over 10 years because of lower projected inflation.

Mandatory Spending. Changes in CBO's economic forecast have had a slightly larger impact on projections of mandatory spending: reducing them by \$57 billion over the 2004-2013 period.

The two mandatory programs most affected by the revised economic forecast are Social Security and Medicaid. Lower projected inflation reduces the nominal amount of the estimated cost-of-living adjustment given to Social Security recipients each year and thus reduces future benefit payments; it also slows nominal wage growth, which affects the levels of benefits for new recipients. Changes in the economic forecast have decreased projected 10-year outlays for Social Security by \$47 billion. Medicaid is similarly affected by lower projections of health care inflation over the next decade; its projected outlays were reduced by a total of \$30 billion from the March baseline.

Payments of unemployment benefits are linked to the unemployment rate. CBO now projects that rate to be higher for the next few years than it estimated in January (6.1 percent this year rather than 5.9 percent, and 6.3 percent in 2004 rather than 5.8 percent). That change has

increased CBO's projection of unemployment benefits by \$2 billion for 2003 and \$5 billion for 2004.

Net Interest. Of all the recent changes to the economic outlook, the decline in short-term interest rates has had the greatest effect on net interest spending. CBO has dropped its forecast of the rate on three-month Treasury bills by 1.5 percentage points for 2004 and by about 1.7 and 1.1 percentage points for 2005 and 2006, respectively. Those changes drive net interest costs below the levels projected in the March baseline by \$2 billion this year and by a total of \$106 billion over the 2004-2013 period.

Overall, revisions to the baseline projections that result from changes in CBO's economic forecast reduce revenues by \$151 billion and outlays by \$223 billion over the next 10 years. CBO estimates that the debt-service savings associated with economic changes total about \$11 billion over the decade.

The Effects of Technical Changes

Technical changes represent revisions to the baseline that are not directly related to enacted legislation or to changes in the economic forecast. Of the \$155 billion increase since March in CBO's estimate of the 2003 deficit, roughly \$40 billion is driven by technical changes—a reduction in revenues of \$53 billion partially offset by a decrease in outlays of \$13 billion. For the next 10 years, technical changes raise the total projected deficit by \$737 billion.

Revenues. About half (\$457 billion) of CBO's total downward reestimate of revenues for the 2004-2013 period is attributable neither to revisions in the economic forecast nor to recent laws. Those technical reestimates largely result from recent information about income tax collections.

Individual Income Tax Receipts. For technical reasons, CBO has lowered its projection of individual income tax receipts by \$29 billion for this year and by \$332 billion for the 2004-2013 period. Without information from returns for tax years 2002 and 2003, analysts must infer the sources of the weakness in this year's receipts from other available information, such as the types of tax payments that have been affected and experience with factors that have caused receipts to deviate from expectations in recent years. Much of the current weakness in

individual income tax receipts comes from sources related to economic activity last year, which are reflected in final payments and refunds during the tax filing season.

The most likely explanations for the low level of 2003 receipts—not including changes in tax law—are smaller-than-expected taxable realizations of capital gains, a reversal of the recent faster-than-average growth of incomes that are taxed at the highest marginal rates, and lower-than-reported incomes as currently measured in the NIPAs. CBO has therefore adjusted its revenue projections to reflect its best judgment about the impact of those factors.

CBO assumes that capital gains realizations move toward their average long-term relationship with GDP and that a similar effect occurs with the relative income of high-income taxpayers. Technical changes to estimates of tax liabilities from capital gains realizations and to estimates of the relative income growth of high-income taxpayers have a stronger effect on receipts early in the 10-year projection period than later.

It is also possible that incomes are lower than currently measured in the NIPAs, but CBO has made no explicit assumptions about future revisions to those data. Recent adjustments by the Bureau of Economic Analysis to incorporate more up-to-date wage and salary information in the NIPAs should make future revisions to those data much smaller. Nonetheless, important measures of non-wage income can vary significantly and be subject to substantial revision.

CBO has also made a number of changes to its revenue models, which have the effect of reducing projected receipts. Those changes include incorporating new modeling of growth in taxable dividends, new population projections, and new projections of pension and IRA distributions.

Nevertheless, after making plausible adjustments to estimates of capital gains and the income growth of high-income taxpayers, as well as incorporating other modeling changes on top of applying the new economic forecast, CBO's modeling is still left with an unexplained residual weakness in tax liabilities of about \$40 billion for tax year 2002 and \$60 billion for tax year 2003.

Based on experience with such residuals and the current economic environment (in which many of the possible causes may be cyclical in nature), CBO has assumed for its current baseline that the unexplained weakness in receipts will persist at the same level for one more year (through tax year 2004) and then phase out gradually over the 2005-2013 period. That unexplained residual, and the way it is carried through the 10-year projection, is a significant part of the technical reestimate of individual income tax receipts in the baseline. The residual differs from a technical reestimate made since the previous baseline in March because unexplained weakness in liabilities existed at that time as well.

Corporate Income Tax and Social Insurance Receipts. CBO has lowered its projections of corporate receipts for technical reasons by \$21 billion for 2003 and \$59 billion over the 2004-2013 period. CBO has assumed that the recent weakness in corporate receipts—none of which can be explained by current information on corporate profits—is caused largely by temporary factors. Many of the potential causes are related to the business cycle or to other factors that CBO considers unsustainable.

The other significant technical reestimates to revenues involve projections of social insurance receipts, which have been reduced by \$55 billion for the 2004-2013 period. Those reestimates are largely explained by new modeling assumptions about the share of workers' wages that fall below the maximum amount subject to Social Security taxes.

Discretionary Spending. On net, technical adjustments lower projected discretionary outlays for 2003 by \$12 billion. Those adjustments chiefly reflect new information about spending so far this year. A variety of adjustments to discretionary spending lower projected outlays by \$5 billion for 2004 but raise them slightly for each subsequent year.

Although technical revisions affect nearly all areas of the budget, the largest involve outlays for defense operations, maintenance, and procurement (reduced by \$6.6 billion for 2003 and by \$3.5 billion for 2004); highway and transit programs (decreased by \$3.9 billion for 2003 and by \$2.0 billion for 2004); and grants for elementary and secondary education (lowered by \$1.1 billion for 2003).

In the opposite direction, CBO has raised its estimate of 2003 outlays for the Transportation Security Administration by \$1.1 billion for technical reasons.

Mandatory Spending. Some of the technical adjustments to mandatory spending affect only 2003; in the case of others, new information necessitates reestimating program spending through the next 10 years. In all, technical adjustments lower projected mandatory spending in 2003 by \$3 billion relative to CBO's March baseline and raise it over the 2004-2013 period by \$29 billion.

The technical revisions involving Social Security add \$33 billion to projected outlays over the 2004-2013 period. Most of that change stems from partially adopting new assumptions about population contained in the 2003 Social Security trustees' report. Somewhat unexpectedly, those assumptions suggest that more people will reach 62—the age for early-retirement benefits—starting in 2007 than previously thought. CBO is continuing to analyze the new data, but in the meantime, it has boosted its estimates of outlays for Social Security benefits over the 2007-2013 period—by as much as 1 percent in 2013.

CBO has lowered its estimates of outlays for unemployment insurance by a total of \$9 billion for 2003 and 2004 because the average benefit appears to be lower than expected for this fiscal year. Also, the ratio of insured unemployment to total unemployment has been lower than anticipated (that is, for a given unemployment rate, fewer people than expected are claiming benefits).

Net Interest. For the 2004-2013 period, projected outlays for net interest are \$246 billion higher than in the March baseline for technical reasons. Of that amount, \$68 billion results from technical adjustments that CBO has made to its projections of net interest, reflecting revised assumptions about the future composition of debt held by the public and other factors. In particular, CBO now assumes that more longer-term debt will be issued than it estimated in March (longer-term debt is generally issued at higher interest rates than shorter-term debt is). That assumption reflects changes in the Treasury's auction calendar that reintroduced three-year notes and increased the frequency of five-year and 10-year issues.

The remainder reflects the effect on debt-service costs of technical changes to CBO's baseline projections. In all, those changes lower revenue projections by \$457 billion over the 2004-2013 period and raise outlay projections (excluding debt service) by \$102 billion. The resulting higher projected deficits are estimated to require about \$178 billion in additional debt-service spending over the decade.

The Long-Term Outlook

Without changes to federal programs for the elderly, the aging of the baby-boom generation will cause a historic shift in the United States' fiscal position in coming decades. The number of people at retirement age is expected to jump by about 80 percent over the next three decades while the number of workers grows by just 15 percent. All of those future retirees are alive today, as are most of the people who will be working 30 years from now (although an increase in immigration and labor force participation over that period could ease some of the pressure by adding to the U.S. workforce). In addition to those demographic changes, costs per enrollee in federal health care programs are likely to grow much faster than inflation.¹⁷

As a result of those forces, federal spending on the major health and retirement programs—Social Security, Medicare, and Medicaid—is projected to grow by more than two-thirds as a share of the economy by 2030, rising from 8 percent of GDP today to 14 percent. Consequently, either taxes will need to rise dramatically, spending on other federal programs will have to be cut severely, or federal borrowing will soar.

Beyond 2030, those fiscal pressures will intensify as longevity continues to increase and health costs continue to grow. Only reforming programs for the elderly before the baby boomers retire and enacting policies to enhance economic growth could alleviate the demands on future generations.

17. See the statement of Douglas Holtz-Eakin, Director, Congressional Budget Office, *The Economic Costs of Long-Term Federal Obligations*, before the House Committee on the Budget, July 24, 2003.

The Economic Outlook

After slow growth during the first half of 2003, the economy now seems poised to expand at a faster pace. Since the first of the year, economic output has grown at an average annual rate of about 2 percent, reflecting not only tensions attributable to the war in Iraq but also a host of other factors, including the slow growth of foreign demand for U.S. goods, fiscal constraints on state and local spending, and businesses' concerns about the durability of the economy's recovery from the 2001 recession. Signs of a pickup in consumer and business spending in the second quarter, the rapid growth of federal purchases, enactment of tax cuts for firms, and a slightly more accommodative monetary policy have improved the economic outlook for the remainder of 2003 and for 2004. The Congressional Budget Office anticipates a rebound in demand in 2003 and real (inflation-adjusted) growth of gross domestic product that approaches 4 percent in calendar year 2004 (*see Table 2-1 and Figure 2-1*).

Yet the outlook for 2003 and 2004 remains uncertain. On the one hand, foreign economic growth and foreign demand for U.S.-produced goods may be greater or smaller than CBO estimates, and the degree to which state and local governments are likely to curtail spending growth cannot be foreseen. In addition, the residual effects of certain economic developments in recent years—the fall in equity markets, the large reduction in households' net wealth, the drop in the personal saving rate, businesses' productive capacity that remains underused, and the U.S. economy's increased dependence on inflows of foreign capital—may continue to dampen growth to a greater extent than CBO has assumed. On the other hand, a number of favorable economic fundamentals, including low inflation and rapid productivity growth, may set the

stage for another long period of strong growth. Beyond that, the forecast is of course subject to the uncertainty that surrounds the economic effects of the war on terrorism, developments in Iraq, and events elsewhere in the world.

Beyond 2004, real GDP growth will average 3.3 percent between 2005 and 2008 and 2.7 percent between 2009 and 2013, CBO projects. Growth of real GDP slows under CBO's projections as the output gap—the difference between GDP and potential GDP—closes. (Potential GDP is the highest sustainable level of GDP consistent with a constant rate of inflation.) Once the gap has been eliminated, projected real GDP grows at the same rate as potential GDP. CBO's baseline projections also reflect the macroeconomic effects of provisions in the Jobs and Growth Tax Relief Reconciliation Act of 2003.

CBO's Two-Year Outlook

Through the end of 2004, the economy will continue to recover from the recession of 2001, CBO forecasts. Because the unemployment rate will remain high and businesses' utilization of their productive capacity will still be low, the main determinant of GDP growth in the near term will be the speed with which the demand for goods, services, and structures grows and puts those underemployed resources to use.

Demand has not grown consistently in recent quarters. Late in 2002 and early in 2003, uncertainty about the underlying strength of the economy and the prospects of war in Iraq strained equity markets, raised oil prices, and depressed consumer confidence. Spending on consumer

Table 2-1.**CBO's Economic Projections for Calendar Years 2003 Through 2013**

	Actual 2002	Forecast		Projected Annual Average	
		2003	2004	2005-2008	2009-2013
Nominal GDP (Billions of dollars)	10,446	10,836	11,406	14,098 ^a	17,943 ^b
Nominal GDP (Percentage change)	3.6	3.7	5.3	5.4	4.9
Real GDP (Percentage change)	2.4	2.2	3.8	3.3	2.7
GDP Price Index (Percentage change)	1.1	1.5	1.4	2.1	2.2
Consumer Price Index ^c (Percentage change)	1.6	2.3	1.9	2.5	2.5
Unemployment Rate (Percent)	5.8	6.2	6.2	5.4	5.2
Three-Month Treasury Bill Rate (Percent)	1.6	1.0	1.7	4.2	4.9
Ten-Year Treasury Note Rate (Percent)	4.6	4.0	4.6	5.7	5.8
Tax Bases (Percentage of GDP)					
Corporate book profits	6.4	6.8	7.0	9.6	8.4
Wages and salaries	47.8	47.3	47.3	47.4	47.4
Tax Bases (Billions of dollars)					
Corporate book profits	665	742	797	1,261 ^a	1,503 ^b
Wages and salaries	4,996	5,128	5,394	6,685	8,518

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Notes: Percentage changes are year over year.

Year-by-year economic projections for calendar and fiscal years 2003 through 2013 appear in Appendix C.

a. Level in 2008.

b. Level in 2013.

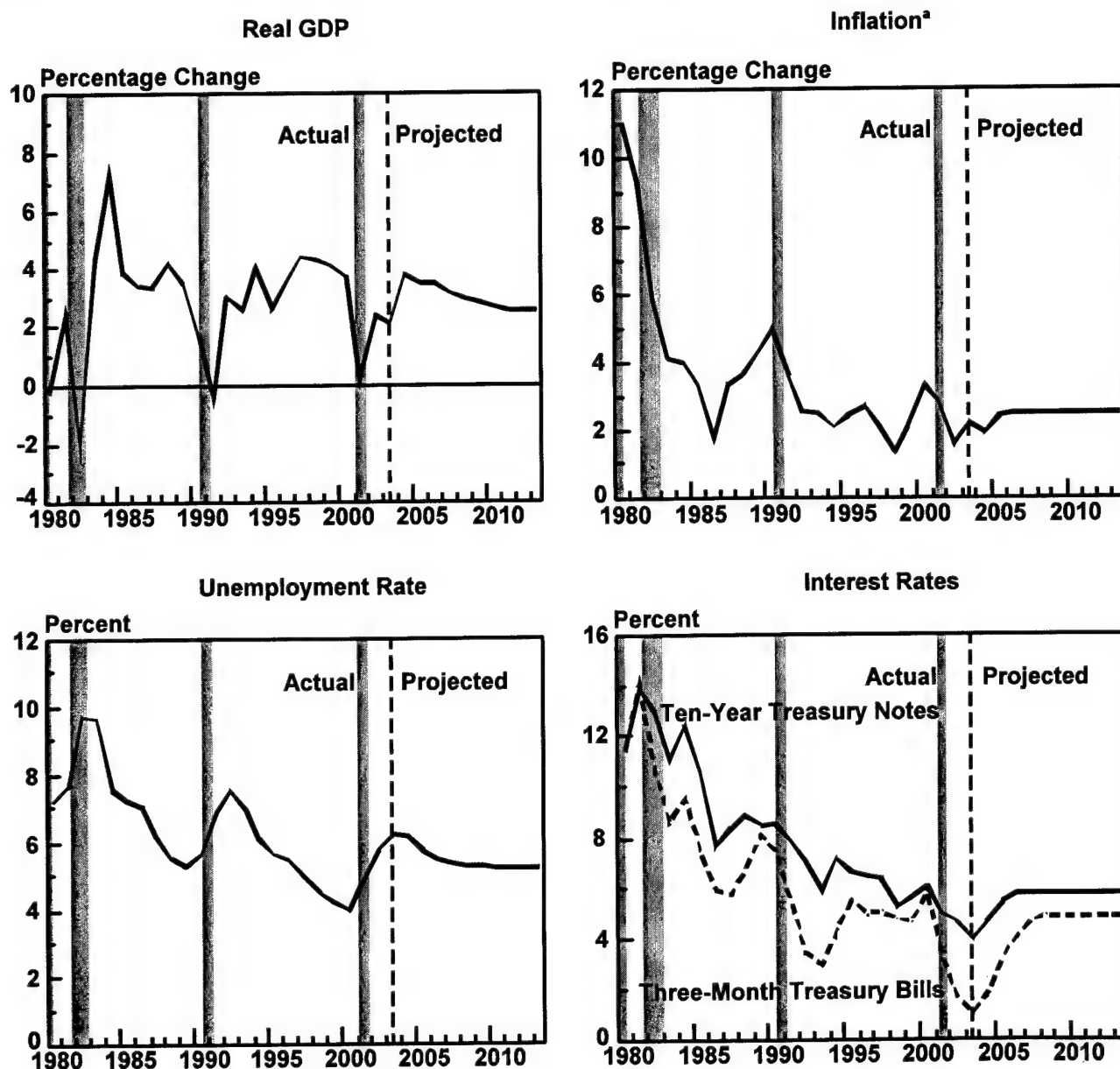
c. The consumer price index for all urban consumers.

goods and services remained sluggish while businesses curtailed investment. For half a year—the last quarter of 2002 and the first of 2003—real GDP grew about half as fast as the trend growth rate of potential GDP. But sentiment among consumers and in the financial and energy markets improved in the second quarter of 2003. In addition, federal defense spending picked up sharply. As a result, the growth of real GDP rose at an annual rate of 2.4 percent. That growth would have been faster if firms had not met some of the increase in demand by drawing down their inventories. However, GDP in the second quarter could be revised upward because the data for trade and retail sales in June suggest that the economy was stronger than had previously been thought.

CBO's two-year forecast anticipates that demand will grow more rapidly in coming quarters than it did in the first half of 2003. In the near term, the growth of consumption

will remain modest because households are likely to save much of the additional disposable resulting from the accelerated tax cuts in JGTRRA in order to rebuild their wealth. Businesses are likely to begin to restock, rather than draw down, their inventories and to increase their spending on producers' durable equipment and structures—so-called fixed investment. Consequently, real GDP is likely to grow by 3.8 percent in calendar year 2004, up from 2.2 percent in 2003. (See Table 2-2 for fourth-quarter-to-fourth-quarter percentage changes.) CBO's forecast incorporates the assumption that the federal government's spending will bolster the growth of demand over the next few quarters, but under CBO's baseline projections (which are described in Chapter 1), federal spending growth is expected to slow in 2004.

CBO does not anticipate a quick drop in the unemployment rate from its current level of 6.2 percent. Typically,

Figure 2-1.**The Economic Forecast and Projections**

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Note: All data are annual values; percentage changes are year over year.

a. The change in the consumer price index for all urban consumers, applying the current methodology to historical price data (CPI-U-RS).

the unemployment rate falls when the growth of real GDP exceeds its potential rate. But even though the growth of GDP that CBO is forecasting exceeds its estimate of potential GDP, CBO expects that unemployment will average 6.2 percent in both 2003 and 2004. In part, that

sustained high rate reflects caution on the part of employers; if they follow recent patterns, they are not likely to resume hiring immediately as demand begins to grow. In part, the rate also reflects the likelihood that the labor force will grow more quickly than it has in recent quarters,

Table 2-2.**CBO's Economic Forecast
for 2003 and 2004**

	Actual 2002	Forecast	
		2003	2004
Calendar Year Average			
Real GDP (Percentage change)	2.4	2.2	3.8
Unemployment Rate (Percent)	5.8	6.2	6.2
Three-Month Treasury Bill Rate (Percent)	1.6	1.0	1.7
Ten-Year Treasury Note Rate (Percent)	4.6	4.0	4.6
Fourth Quarter to Fourth Quarter (Percentage change)			
Nominal GDP	4.3	4.0	5.8
Real GDP	2.9	2.6	4.1
GDP Price Index	1.3	1.4	1.7
Consumer Price Index ^a			
Overall	2.2	2.0	2.2
Excluding food and energy	2.1	1.5	2.3

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. The consumer price index for all urban consumers.

because people who became discouraged in their job searches in the past few years may now reenter the labor market and be tallied among the unemployed.

Financial Conditions and Monetary Policy

Financial conditions have generally improved since the beginning of this year, and CBO forecasts that monetary policy will continue to support the growth of demand through the end of 2003. An index of financial market conditions, combining the stance of monetary policy with a quantitative assessment of the channels through which that policy operates, can indicate roughly the extent to which financial markets support economic growth (*see Figure 2-2*).¹ Despite the Federal Reserve's efforts to boost

the economy, the index, primarily because of a slumping stock market, indicated that financial and monetary conditions were not conducive to growth in 2001 and 2002. But as the U.S. dollar gradually depreciated and the stock market rebounded during the second quarter of this year, the index improved markedly.

In May, the Federal Reserve said it believed that the risk of lower inflation was minor but exceeded that of higher inflation. In turn, participants in financial markets concluded that the federal funds and other short-term interest rates would drop further and would stay low longer than they had originally anticipated—possibly well into 2004. The yield on 10-year Treasury notes (which embodies expectations about future short-term rates) consequently fell from 3.9 percent at the end of April to 3.1 percent in mid-June, its lowest rate since the late 1950s.

In late June, however, when the Federal Reserve cut a quarter of a percentage point from its target for the federal funds rate (the rate that financial institutions charge each other for overnight loans of monetary reserves)—which left the rate at 1 percent—the yield on 10-year Treasury notes actually increased. That rise apparently reflected not only disappointment among financial market participants expecting a larger rate cut but also other factors, including increased signs of a pickup in real growth and perhaps new concerns about the prospect of large federal funding requirements. By early August, the rate on 10-year Treasury notes exceeded 4 percent.

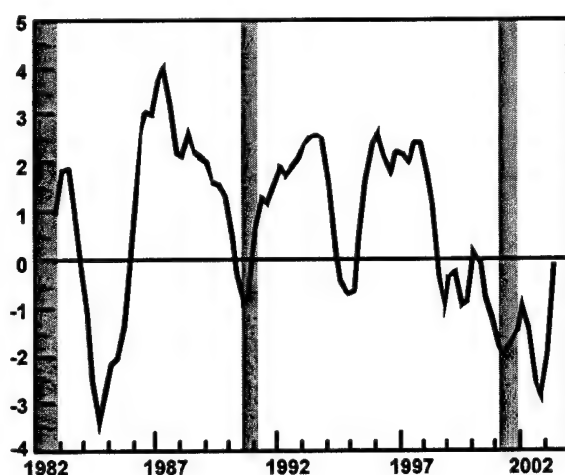
CBO forecasts that short-term interest rates will remain at their current low levels through 2003 but will rise once the growth of demand begins to pick up (*see Table 2-2*). The interest rate on three-month Treasury bills will remain near 1.0 percent during the remainder of 2003, CBO estimates, and then increase in early 2004. The rate on 10-year Treasury notes, after averaging 3.6 percent in the second quarter, is expected to average about 4.1 percent in the second half of 2003, climbing to approximately 5.0 percent by the end of 2004.

1. Financial market measures—such as the dollar, the stock market, and interest rates—are affected both by monetary policy and by the demand for and supply of funds in the economy. The index of financial market conditions, which summarizes a number of those measures, does not attempt to separate what is attributable

to monetary policy from what is determined in the market. Its main usefulness is in describing the financial conditions under which households and businesses operate.

Figure 2-2. An Index of Monetary and Financial Conditions

(Percentage points of GDP growth)



Sources: Congressional Budget Office; Macroeconomic Advisers, LLC.

Notes: This index estimates how supportive financial markets are of the rate of growth of real GDP. It draws on statistical relationships between real GDP and financial variables such as interest rates, exchange rates, and equity values. When the index is positive, overall conditions in the financial markets are conducive to the growth of real GDP. When it is negative, overall financial market conditions are a drag on growth.

The last data point is the second quarter of 2003.

Fiscal Conditions

Actions by federal policymakers from early 2001 to the present have mitigated the recent economic downturn and bolstered the recovery by cutting taxes and increasing spending. Cumulatively, those policies (not including shifts in the timing of payments) reduced the surplus in fiscal year 2001 by about \$50 billion and increased the deficit in 2002 by approximately \$180 billion. In 2003 and 2004, they are projected to increase the deficit by about \$360 billion and about \$520 billion, respectively. Policy actions by many state and local governments, which have faced budget shortfalls in recent years, are not likely to substantially offset the effects of federal policies (*see Box 2-1*).

Two pieces of tax legislation—the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003—have

boosted disposable personal income. JGTRRA accelerates into 2003 reductions in personal income tax rates that were previously scheduled under EGTRRA but would have taken effect later. Beyond that, JGTRRA includes provisions that expand marriage penalty relief, temporarily increase exemptions under the alternative minimum tax, and temporarily expand the child tax credit (through 2004). JGTRRA also cuts tax rates on dividends and capital gains (through 2008). CBO estimates that the law's provisions lower personal income tax payments by a total of \$39 billion in fiscal year 2003 (or by approximately 0.4 percent of projected GDP for that year)—almost entirely in the third quarter. The tax reduction will add about 8 percentage points (measured at an annual rate) to the growth of disposable income in the third quarter, CBO estimates.

JGTRRA also includes provisions to spur businesses to invest. The law expands incentives in the Job Creation and Worker Assistance Act of 2002 (JCWAA) to bolster business fixed investment by temporarily increasing, for tax purposes, the fraction of new investment spending that firms can “expense” (basically, deduct from their taxable income immediately rather than over time). JGTRRA allows firms, through the end of 2004, to expense 50 percent of the value of new investment in the first year after purchase; it also increases through 2005 the limit on the expensing of new depreciable assets by small businesses.

Composition of Demand Growth

The growth of demand stems from the actions of private decisionmakers—in the household and corporate sectors, both at home and abroad—and from decisions about government spending.

The Household Sector. Households' spending on consumption and housing, which expanded during the recent recession and has continued to grow since then, is likely to lag behind the growth of GDP in the near term. Real consumer spending grew at an average annual rate of 2.7 percent in the first two quarters of this year, a bit below its average of 2.9 percent during the second half of last year, and real residential investment (primarily new homes and improvements to existing homes) rose by more than 8 percent. Consumer spending is expected to continue growing at an average annual rate of between 2.5 percent

Box 2-1.**Are State and Local Fiscal Actions Offsetting Federal Fiscal Actions?**

Many state and local governments, faced with severe shortfalls of revenues, are taking action to avoid budgetary imbalances. Those measures on their own would tend to reduce aggregate demand—which is the opposite of the effect of recent federal fiscal actions. However, the federal government's fiscal actions are much larger than the measures that the state and local governments are likely to employ. As a result, the government sector as a whole is contributing to the growth of demand in the short term.

The strong economy and soaring stock market of the late 1990s significantly boosted the growth of government revenues, enabling states and localities to cut taxes, undertake new programs, and hike spending for existing activities at the same time they were building their reserves to high levels.¹ But the recession of 2001 and the stock market slump that began in 2000 severely reduced the growth of government revenues, which raised the prospect of substantial state budget deficits if remedial actions were not taken.² Most states have constitutional or statutory requirements for balancing their general fund budgets (though most requirements also allow for the use of some temporary sources of financing); therefore, they had to act to address those prospective deficits. Initially, states responded to weakening revenues by using their reserves and tapping other sources of temporary funding. Increasingly, though, they

have cut the growth of spending and raised taxes. For example, general fund spending by the states, which amounts to about 5 percent of gross domestic product (GDP), rose by 8.3 percent in fiscal year 2001, but spending growth then plummeted to a rate of 1.3 percent in 2002 and an estimated 0.3 percent in 2003.³

The reduction in the growth of states' general fund spending, however, is a narrow and thus potentially misleading indicator of the macroeconomic impact of the state and local sector. A more comprehensive measure of state and local spending can be drawn from the national income and product accounts (NIPAs), and that measure indicates much less of a slowdown. The NIPAs include all state spending—not just that from general funds (which constitutes about one-half of total state expenditures); the measure also takes into account spending by local governments, which exceeds total expenditures by the states.⁴ Total spending by the state and local sector as recorded by the NIPAs (which amounts to about two-thirds that of the federal sector) grew by 8.5 percent in fiscal year 2001, 5.9 percent in 2002, and 5.3 percent in 2003. (See Appendix B for a discussion of the NIPAs.)

Yet looking exclusively at the slowdown in the growth of the NIPA measure of state and local spending still overstates the sector's macroeconomic impact. The decline in the growth of state and local revenues that can

1. See Ronald K. Snell, Corina Eckl, and Graham Williams, *State Spending in the 1990s* (Washington, D.C.: National Conference of State Legislatures, July 14, 2003).

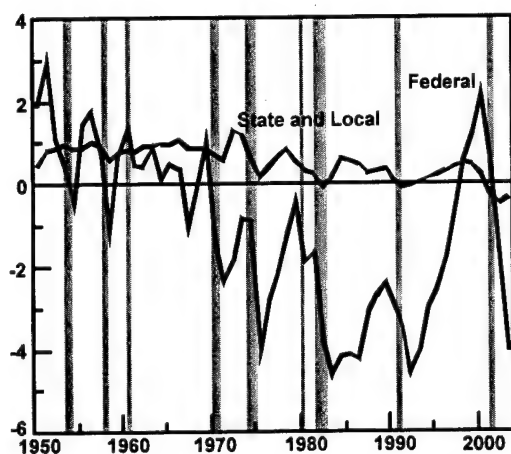
2. The federal tax cuts contained in the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), the Job Creation and Worker Assistance Act of 2002 (JCWAA), and the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) had adverse effects on state and local revenue collections, because many states and localities in some way tie their income taxes to federal tax calculations. To some extent, however, state and local governments have taken action to mitigate that adverse effect by "decoupling" their income tax calculations for individuals and businesses from some of the new federal tax provisions.

3. See National Association of State Budget Officers and National Governors Association, *Fiscal Survey of the States* (Washington, D.C.: National Association of State Budget Officers and National Governors Association, June 2003). Most state fiscal years run from July through June.

4. Although the NIPAs usually report data for state and local governments combined, a recent publication separates data for states and localities, reporting them on an annual basis for the 1959-2001 period. It also discusses several important differences between state budget and NIPA data. See "Receipts and Expenditures of State Governments and of Local Governments, 1959-2001," *Survey of Current Business* (June 2003), pp. 36-53.

Box 2-1.**Continued**

Government Surpluses or Deficits
(Percentage of potential GDP)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: The last data point is CBO's forecast for 2003.

be attributed to the weak economy, although much smaller than at the federal level, has helped cushion disposable income. That buffer helps to offset some of the economic restraint coming from the slower growth of spending by state and local governments.⁵

CBO expects further budgetary actions by state and local governments that will tend to reduce the growth of aggregate demand, but they are unlikely to significantly offset the federal government's actions (including about \$20 billion of aid to states over fiscal years 2003 and 2004 from JGTRRA), which are working to increase demand. The historical record suggests that the offset to federal fiscal policy will be relatively small: the budget balances of the state and local government sector fluctuate much less than those of the federal government

relative to potential (cyclically adjusted) GDP (*see the figure at left*). At the same time, slower-than-expected growth of the economy could reduce the growth of state and local government revenues below current projections, and that could result in larger tax increases and more spending restraint by state and local governments than are now expected.

Accounting for Fiscal Pressures on State and Local Governments

The fiscal difficulties of states and localities seem to be due to a combination of a slowdown in the growth of revenues and a lag in the slowdown in the growth of spending. Throughout most of the 1990s, total state and local spending rose relative to potential GDP, but revenues grew even faster, producing growing surpluses (*see the figure on the next page*). In the late 1990s, spending grew faster than revenues, but the years of state and local surpluses did not end until the recession began in 2001. With the recession, the growth of revenues slowed dramatically, but the growth of spending did not slow quickly enough to avoid the onset of deficits.

State Budget Shortfalls and Recent Actions Taken by States

Thirty-nine states projected budget shortfalls for 2003, the fiscal year that ended in June for most states.⁶ (A shortfall is defined by the National Conference of State Legislatures as the difference between a state's projection of general fund revenue collections and projected general fund spending during a fiscal year. General fund revenues are essentially those raised by states through taxes and fees and exclude rainy-day funds, federal funds, and bond funds.) California, New York, and Texas, which

5. Estimates of the cyclical sensitivity of state and local budgets are presented in Brian Knight, Andrea Kusko, and Laura Rubin, "Problems and Prospects for State and Local Governments," *State Tax Notes*, August 11, 2003, pp. 427-439.

6. See National Conference of State Legislatures, *State Budget and Tax Actions 2003* (Washington, D.C.: National Conference of State Legislatures, July 23, 2003). According to the most recent survey conducted by the National Conference of State Legislatures, the shortfalls projected during 2003 exceeded 10 percent of general fund spending in 20 states, yet balances available in all general funds and "rainy-day" reserves totaled 3 percent of general fund spending that year.

Box 2-1.**Continued**

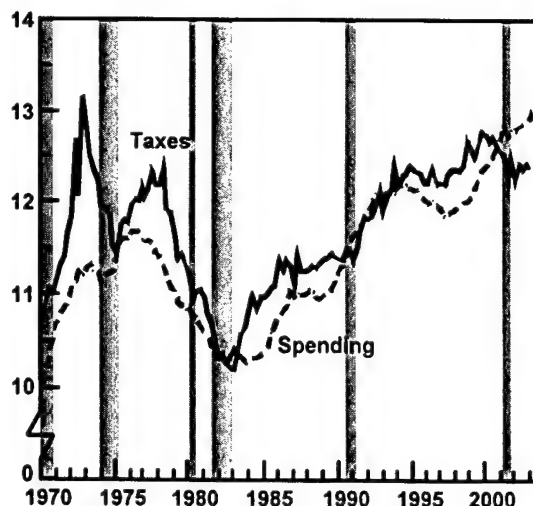
account for 30 percent of states' general fund spending, accounted for almost 50 percent of the budget shortfall reported by states during fiscal year 2003.

States have taken significant budgetary action since 2001 to respond to fiscal pressures. In addition to slowing the growth of general fund spending, they have drawn down their reserves from nearly \$49 billion at the end of fiscal year 2000 to less than \$7 billion at the end of fiscal year 2003. States have also imposed net tax increases since 2002 totaling almost \$25 billion (on an annual basis), which is equivalent to about 5 percent of states' general fund revenues.⁷

In 2001, the net effect of changes in taxes and fees among all the states was a reduction in revenues of about \$6 billion, with eight states increasing taxes and 28 states decreasing them. That was the seventh consecutive year in which states had cut taxes on a net basis. In fiscal year 2002, 15 states reduced taxes while 14 states increased them; the net effect for that year was an increase of about \$0.3 billion. Three states—Minnesota, New Jersey, and North Carolina—accounted for the bulk of those increases. In 2003, 24 states enacted tax and fee increases totaling more than \$8 billion. Three categories accounted for most of the net rise in taxes: cigarette and tobacco taxes (19 states had increases

7. See National Association of State Budget Officers and National Governors Association, *Fiscal Survey of the States*.

State and Local Taxes and Spending
(Percentage of potential GDP)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: The last data point is the second quarter of 2003.

totaling almost \$3 billion), sales taxes (11 states had increases totaling almost \$1.5 billion), and corporate income taxes (eight states had increases totaling about \$1 billion). Thus far in fiscal year 2004, 44 states have enacted tax hikes (mostly on sales) or various fee increases totaling over \$15 billion (or about 3 percent of general fund revenues). At the same time, general fund spending is budgeted to grow by about 1 percent above 2003 levels.

and 3.0 percent; residential investment is forecast to grow slightly through 2004.

Several factors are likely to hold down the growth of household spending in the remainder of 2003 and in 2004. First, the effects of the sales incentives offered by automobile manufacturers appear to be waning. Second, the recent increase in long-term interest rates is expected to slow residential investment and curtail the boom in cash-out mortgage refinancing. Third, households' loss of wealth over the past three years—particularly wealth lost through the decline of the stock market, which has

now only partly recovered—may continue to moderate the pace of household spending. Fourth, the slow recovery projected for labor markets is likely to restrain the growth of income. Finally, although the household sector as a whole appears to be in generally good financial health, some people are evidently feeling the strain of a long period of economic weakness.

Employment and Income. Weak labor markets have held down the growth of consumers' incomes since the onset of the recession. The outlook for the remainder of 2003 and for 2004 includes moderate gains in employment as

the growth of demand picks up, but the recovery of labor markets is still likely to lag behind that of the economy.

The record of employment growth over the past two years has been even worse than in the "jobless recovery" of the 1991-1993 period (see Figure 2-3). (Another measure of employment looks slightly more hopeful; see Box 2-2.) From the business-cycle peak in March 2001 to December 2002, total nonfarm payroll employment fell by 1.8 percent (or 2.3 million jobs). It declined by another 0.3 percent (or 328,000 jobs) during the first seven months of 2003.² That weakness reflects the lackluster nature of the recovery of demand in the economy and an extraordinary increase in productivity.

Productivity growth normally increases during the economy's recovery from a recession, as businesses use existing labor and capital more intensively while remaining cautious about permanently adding workers in the face of excess productive capacity. As a result, employment—although growing—does not keep pace with output, and output per worker increases. In the past year, however, productivity has grown even more rapidly than in many past recoveries. Private payroll employment thus continued to decline as the growth of demand remained subdued. Consequently, productivity growth accounted for more than 100 percent of the rise in GDP over the period. According to CBO's forecast, productivity's share of GDP growth will fall to about two-thirds over the near term, an outcome consistent with increasing employment.

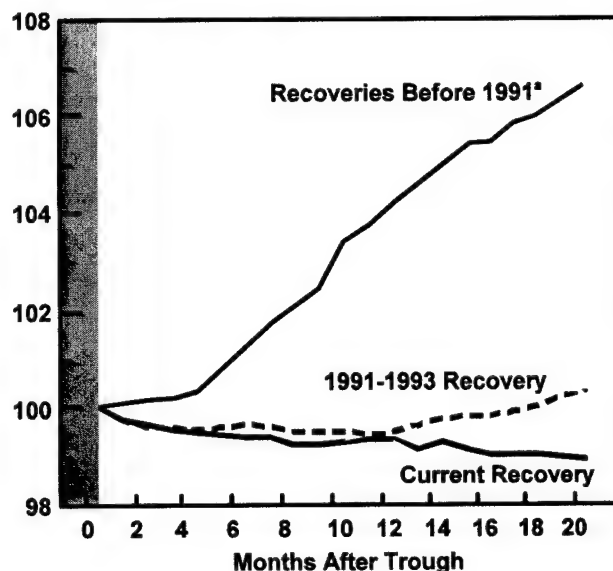
Yet the unemployment rate is expected to remain high, averaging 6.2 percent over the forecast period. In recent months, the rate rose from 6.0 percent last December to 6.4 percent in June and then fell slightly, to 6.2 percent, in July. Unemployment has been lower since the recession than it might have been because an unusually large number of people left the labor force, possibly because they were discouraged by the poor prospects for employment.

2. Job losses in manufacturing more than accounted for the weakness in payroll employment. After eliminating over 2 million jobs between March 2001 and December 2002, manufacturers cut their payrolls by another 2.7 percent (or 408,000 jobs) during the first seven months of this year. The length of the average workweek has also fallen sharply, returning to lows last seen in late 2001.

Figure 2-3.

Private Payroll Employment During Recoveries from Recessions

(Index, trough month = 100)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Note: The trough of the last recession was November 2001, as designated by the National Bureau of Economic Research.

a. Average of seven recoveries during the 1949-1990 period, excluding the 1980 recovery.

The number of people working (or actively looking for work) as a percentage of the working-age population dropped from 67.3 percent early in 2000 to 66.4 percent in mid-2003. Although such a decline is common in business-cycle downturns, the recent fall has been both slightly greater and more prolonged than usual. As the job market improves, some people who have stayed out of the labor force are likely to begin to seek work, and labor force growth will thus almost keep pace with the growth of employment in 2004, CBO estimates. By the end of 2004, employment growth will have picked up enough to begin to bring the unemployment rate down below 6 percent.

CBO anticipates that the growth of personal income will rise during the balance of 2003 and in 2004. Over the first half of this year, real disposable personal income grew at an average annual rate of 2.3 percent, although real wage and salary income grew by only 1 percent. CBO's forecast

Box 2-2.**Uncertainty About Recent Employment Growth**

Assessing the current state of labor markets is more difficult than usual because the two employment surveys used in such analyses present conflicting stories about the recent growth of employment. (The two measures—the establishment, or payroll, survey and the household survey—are both published by the Bureau of Labor Statistics [BLS].) The household survey, which is based on interviews with individuals in their homes, implies that employment has recovered modestly since the recession reached its trough in November 2001. In contrast, the establishment survey, which is based on payroll data reported by firms, indicates that there are about 1 million fewer jobs in mid-2003 than there were at the trough. That disparity between the two stories holds up even after adjusting for some of the obvious differences in the surveys (the population adjustment that BLS made in the household survey in January 2003 and whether they count self-employed people or multiple job-holders). The two surveys usually provide slightly different pictures of employment growth during recoveries, but the difference is larger than usual this time. Moreover, this is the first instance in which one survey indicates employment growth while the other suggests contraction.

The establishment survey better reflects the state of labor markets, the Congressional Budget Office believes, not only because other indicators also imply rather weak labor-market conditions but because large revisions or misreporting appears less likely for the establishment than for the household data. Data on tax withholding conform better to the establishment survey's results than to the household survey's; in addition, both the share of employed people who are working part-time for economic reasons and the still low labor force participation rate indicate weaker labor markets than those existing at the trough. Three other measures suggest the same conclusion: during the first half of the year, the unemployment rate rose, both initial and continuing claims for unemployment insurance remained elevated, and the help-wanted index fell.

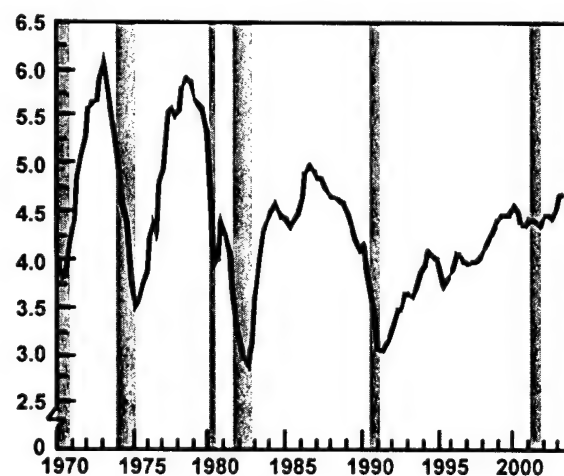
incorporates the assumption that wage and salary income will begin to rise and will grow at the same rate as nominal GDP. It also incorporates the sharp increase in disposable income that the tax cuts are expected to bring in the second half of 2003.

The Housing Market. In the near term, housing will no longer be a strong contributor to growth, CBO forecasts. By the end of June, interest rates for 15- and 30-year mortgages had fallen from December's levels by more than 80 basis points—to 4.6 percent and 5.2 percent, respectively—and were the lowest since Freddie Mac began recording them in 1971. Largely because of that drop in rates, the pace of new-home building was rapid during the first half of 2003. But the increase in real residential investment fell short, despite the dip in mortgage rates, of the contribution housing has made to previous recoveries (see Figure 2-4). By late July, mortgage rates had retraced all of their first-half declines. The housing market is thus likely to cool in the near term, although the level of housing starts remained high through July.

In the first half of 2003, as in 2002, many consumers chose to refinance mortgages to take advantage of excep-

Figure 2-4.**Residential Investment**

(Percentage of potential GDP)

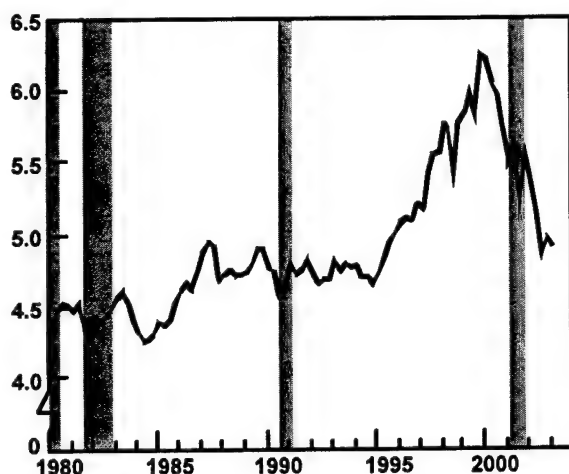


Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: The last data point is the second quarter of 2003.

Figure 2-5.**Households' Net Wealth**

(Ratio to disposable personal income)



Sources: Congressional Budget Office; Federal Reserve Board; Department of Commerce, Bureau of Economic Analysis.

Note: The last data point is the first quarter of 2003.

tionally low interest rates. (Such refinancing does not alter the overall wealth of the household sector because the gains of people who refinance come at the expense of losses for those holding the original mortgages.) Freddie Mac estimates that homeowners cashed out about \$50 billion of home equity from their mortgage refinancing in the first half of the year, following record cash-outs of \$96 billion in 2002. Consumers tend to use about one-half of their cash-outs to finance additional spending on home improvements or consumer goods. They use the remainder apparently to make portfolio adjustments by, for example, paying down nonmortgage debt or increasing other investments.³

Households' Net Wealth and Saving. The net wealth of households (their financial plus tangible assets minus their debts) has fallen sharply since its peak in 2000, but it changed relatively little from the third quarter of 2002

through the first quarter of 2003 (the latest available data), holding at roughly \$39 trillion. That plateau reflects the largely offsetting influences of the continued appreciation of households' real estate holdings, a decline in the stock market, and a sharp rise in debt, primarily home mortgage debt. Consequently, the ratio of households' net worth to their disposable personal income (the net wealth ratio) has varied little for the past few quarters (see Figure 2-5). The significant rebound in stock prices in the second quarter suggests that households' net wealth may have risen in recent months.

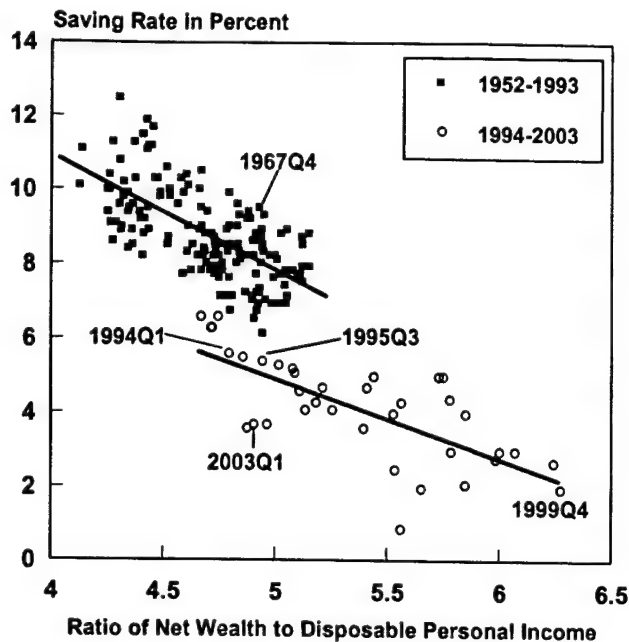
Given the drop in their net wealth since 2000, households have raised their rate of saving—but by less than recent experience suggests they might have (see Figure 2-6). Between the fourth quarter of 1999 and the first quarter of 2003, when the net wealth ratio fell from 6.3 to 4.9, the personal saving rate rose from 1.9 percent to 3.6 percent. The last time the net wealth ratio was 4.9 was in the third quarter of 1995, when the personal saving rate was 5.3 percent. That suggests that households may wish to raise their saving rate in the near term.

Some analysts have worried (on the basis of comparisons with earlier quarters, also shown in Figure 2-6) that households might want to raise their saving rate even more—which would imply correspondingly weaker growth of consumption. For example, at the end of 1967, when the net wealth ratio was similar to the level in the first quarter of this year, the saving rate averaged 9.5 percent. However, as Figure 2-6 suggests, the relationship between the net wealth ratio and the personal saving rate appears to have shifted down since 1993, implying less cause for concern.

The Financial Health of the Household Sector. The household sector appears financially sound overall. Households' debt has risen sharply during the recovery, growing by 10 percent in 2002 and by another 10 percent in the first quarter of 2003. Home mortgage debt accounted for much of that first-quarter expansion; it rose by 12 percent compared with an increase of 4.3 percent in debt for consumer credit. The refinancing boom has allowed homeowners to repay more-costly consumer debt and lower their monthly mortgage payments. That boom, plus modest growth of consumer spending and lower interest rates, has helped stabilize the household sector's debt-service burden over the past year. Another indicator of

3. Survey data indicate that homeowners are likely to use a third of their cash-outs on home improvements, a sixth on consumer goods and services, a quarter to pay down nonmortgage debt, and the bulk of the rest on financial as well as real estate and business investments. See "Mortgage Refinancing in 2001 and Early 2002," *Federal Reserve Bulletin* (December 2002).

Figure 2-6.
Net Wealth and the Personal Saving Rate



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

Note: The graph displays the relationship between the personal saving rate and the ratio of household net wealth to disposable personal income from 1952 to the first quarter of 2003. Each point represents a saving rate/net wealth ratio pair for a quarter within that time span. The points arrange themselves into two distinct groups: the dark squares designate quarters prior to 1994 and the circles, quarters in 1994 and after. The figure suggests that the relationship between the saving rate and the net wealth ratio shifted downward after 1993.

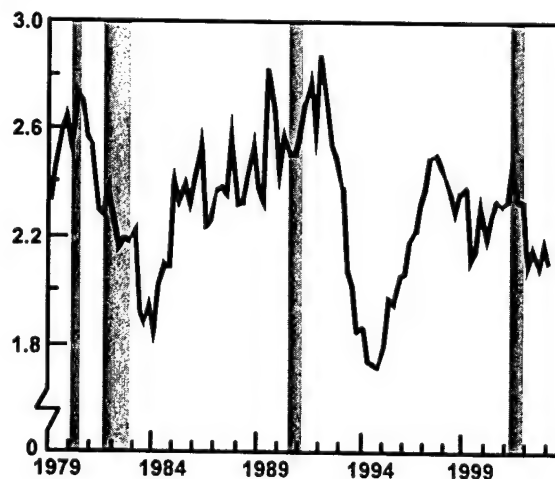
the sector's financial health, the delinquency rate on a broad range of consumer loans at commercial banks, is now below a two-decade average of about 2.3 percent (see Figure 2-7). Moreover, the delinquency rate on conventional mortgages, which make up the vast bulk of outstanding mortgage loans, has steadied, skirting mid-1990 levels of a little over 3 percent of all loans during the first half of 2003.

Nevertheless, certain groups of borrowers are experiencing financial distress. The delinquency rates on bank credit card debt as well as on mortgage loans guaranteed by the

Veterans Administration (VA) and Federal Housing Administration (FHA) remain at relatively high levels. However, VA and FHA loans are generally more prone to default than are conventional mortgages.

The Government's Purchases of Goods and Services. Recent federal spending policies contributed to the growth of demand in the first half of this year and are expected to raise demand further during the second half. Real federal purchases, measured on a national income and product account basis, will expand by about 10 percent this year, CBO estimates, driven largely by real defense spending. But CBO's budget projections are required to assume that appropriations after the current budget year will increase from their current levels by only the rate of inflation. Thus, CBO's economic forecast incorporates the assumption that real growth of federal spending for goods and services will slow in the future.

Figure 2-7.
Delinquency Rate on Consumer Loans at Commercial Banks
(Percentage of loans)



Sources: Congressional Budget Office; American Bankers Association.

Notes: The data cover eight kinds of closed-end (nonrevolving) loans: personal, direct auto, indirect auto, mobile home, recreational vehicle, marine-related, property improvement, and home-equity and second mortgages.

The last data point is the first quarter of 2003.

The pace of state and local governments' real purchases has slowed this year but has not substantially offset the strong growth of real federal purchases (*see Box 2-1 on page 30*). With state and local revenues low relative to their trends in the late 1990s, the aftereffects of slumping equity markets and the recent recession have led state and local governments to curtail the growth of their purchases of goods and services to help correct fiscal shortfalls. As a result, real state and local spending (measured on a NIPA basis) is expected to be roughly flat in both 2003 and 2004 after expanding at an annual rate of almost 3 percent in 2002.

Net Exports. The U.S. trade deficit rose from 4.1 percent of GDP a year ago to a record 4.7 percent in the second quarter of 2003. According to CBO's estimates, the gap will continue to widen through the end of 2004. The drop in the value of the dollar against the currencies of the United States' major trading partners since early last year is still modest on a trade-weighted basis, but with the decline expected to continue through the end of 2004, the dollar's depreciation will eventually help narrow the trade deficit. In the interim, relatively weak growth abroad has continued to depress the growth of U.S. exports. If, as CBO expects, foreign economic growth picks up and the dollar continues to decline through the end of 2004, the real trade balance will improve in 2005 and beyond.

Foreign Economic Conditions. Overall economic conditions in the rest of the world are weak. With growth in the European Union (EU) and Japan lagging behind U.S. growth, and with developing economies dependent on export markets in more advanced countries, the United States is expected to continue as the primary locomotive of world economic expansion in the near term.

The economies of many major European countries continue to struggle toward recovery. Real GDP has contracted in several of them, including Germany, Italy, the Netherlands, and Switzerland. Germany, the largest economy in the euro zone (the EU countries that have adopted the euro), has technically entered its second recession in two years and, despite some signs of a nascent rebound, is not expected to make a strong recovery in the near term.

Economic growth in the other two major European economies, France and the United Kingdom, remains only slightly positive.

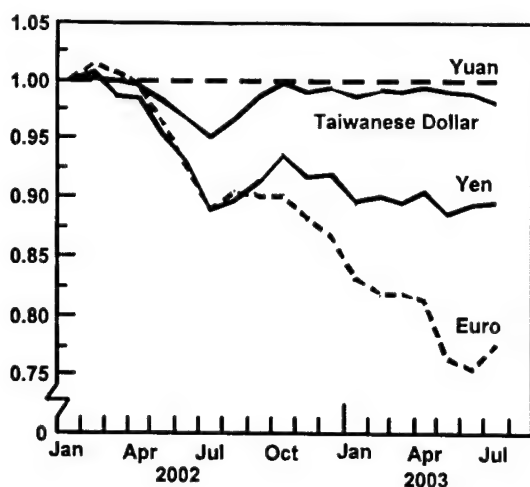
Fiscal and monetary policies in the euro zone thus far have not played a significant role in increasing demand. The protracted economic stagnation in Germany and France has helped push government deficits above the limit (3 percent of GDP) set under the fiscal rules adopted by the euro zone nations, leaving little room for expansive policies. The European Central Bank cut its target interest rate by 75 basis points (0.75 percentage points) to 2 percent during the first half of the year; however, the appreciation of the euro against the dollar since March 2002 has made products priced in euros more expensive, offsetting some of the interest rate reduction's effect on overall demand in the euro area.

In Asia, Japan's economy in the second quarter grew faster than had been expected, expanding by 2.3 percent, but its near-term economic outlook continues to be dominated by the depressing effects of entrenched price deflation, "nonperforming" loans, and a large public debt. Among emerging nations in Asia, growth held up relatively better, although it lost some momentum partly as a result of the spread of SARS (severe acute respiratory syndrome) and the economic slump in the industrialized countries. Economic growth in China, which also lost steam in the second quarter as a result of SARS, is expected to resume its near 8 percent average annual rise in the second half of this year. Robust foreign demand for China's manufactured exports, which have become even more competitive in the international market as the yuan has depreciated with the dollar, has helped bolster China's continuing economic strength.

In South America, the economic crises in Brazil and Argentina are now past, but significant obstacles to sustained growth remain. In North America, a sluggish U.S. economy and an appreciating Canadian dollar have slowed the growth of real GDP in Canada to less than 3 percent. In Mexico, real GDP has declined for two consecutive quarters, in large measure reflecting a slump in U.S. demand for Mexican exports and direct competition from Chinese imports.

Figure 2-8.**The Dollar's Exchange Rate Relative to Selected Currencies**

(Index, January 2002 = 1)



Sources: Congressional Budget Office; Federal Reserve Board.

Notes: The yuan and yen are currencies of the People's Republic of China and Japan, respectively.

The last data point is July 2003.

The Dollar's Exchange Rate. CBO expects the U.S. dollar to continue to gradually depreciate during the second half of 2003 and in 2004. The dollar fell in the first half of this year against a broad basket of currencies, extending a downward trend that began in March 2002. It declined most sharply against the currencies of many industrialized trading partners—with the exception of Japan—and more modestly against the currencies of other Asian nations (see Figure 2-8). That more limited depreciation may have been due to Asian governments' interventions in the foreign exchange markets.

The Corporate Sector. Businesses increased their investment spending only weakly in the first half of 2003 (see Figure 2-9). Real spending on producers' durable equipment rose—but at an average annual rate of only a little over 1 percent. Spending on information technology accounted for much of that modest advance, growing robustly in both the first and second quarters. Firms' spending on structures was largely flat but did include a lively pickup in drilling activity in the second quarter in

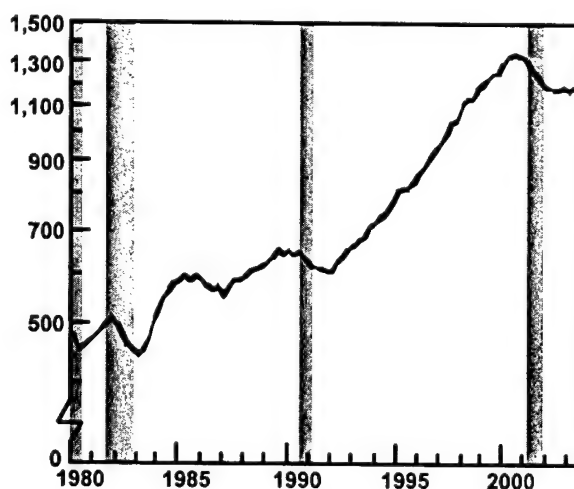
response to higher energy prices. By mid-2003, total real business fixed investment was only slightly above its average level for 2002 as a whole.

Businesses drew down their inventories during the first half of 2003 after some modest rebuilding of stocks in 2002 (see Figure 2-10). They responded to the first quarter's weak demand largely by filling increased orders out of their inventories rather than stepping up production in the second quarter. As a result, the ratio of inventories to sales for the first half of the year turned down slightly.

An anticipated rise in the growth of demand and the expiration of JGTRRA's partial-expensing provisions will encourage businesses to replace existing capital and expand productive capacity in 2004, CBO forecasts. JGTRRA's partial expensing is likely to increase business fixed investment by 0.2 percent of GDP in 2003 and 0.5 percent of GDP in 2004. (The effect is greater in 2004 in part because firms are likely to shift investment from 2005 into the second half of 2004 to take advantage of the provisions before they expire.) Firms' purchases of computer equipment are likely to account for much of that near-term investment, although purchases of other kinds of durable

Figure 2-9.**Business Fixed Investment**

(Billions of 1996 dollars)

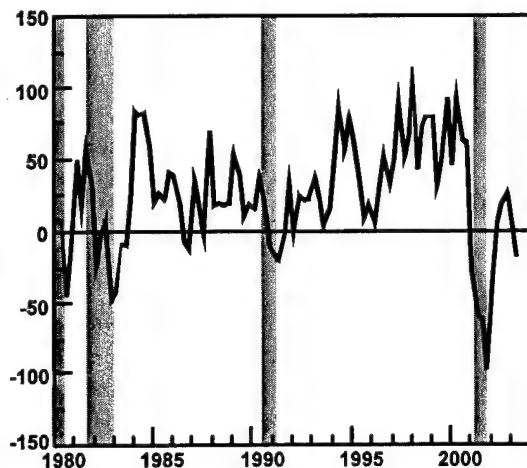


Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: The last data point is the second quarter of 2003.

Figure 2-10.**Change in Businesses' Inventories**

(Billions of 1996 dollars)



Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

Note: The last data point is the second quarter of 2003.

equipment as well as spending on structures will also expand in 2004. In addition, if demand strengthens in the second half of 2003 and in 2004, businesses are likely to restock their shelves after the inventory drawdown during the first half of 2003.

One factor that supports CBO's expectations of increased near-term spending by businesses is the improved financial conditions in the corporate sector so far this year. Corporate profits have bounced back from the low levels they reached during the recession, and CBO foresees rapid growth through the end of 2004. Also encouraging businesses to expand their spending is the recent rebound in equity markets and a reduction in the yields on corporate bonds, which have lowered the cost of capital and allowed firms to improve their balance sheets.

Demand for Products. A key requirement for a persistent upturn in business fixed investment is an expectation that the growth of demand will quicken. Such a speedup in the pace of growth appears to have begun. Final sales of domestic product (GDP minus inventory investment) grew at an average annual rate of 2.7 percent during the

first half of this year, after expanding by 2.3 percent during the second half of 2002.

Profits. The rise in corporate profits in the first quarter of 2003 is likely to continue through 2004; CBO estimates that the GDP share of economic profits (profits from current production, adjusted for changes in the value of inventories and for depreciation of capital) will rise from 7.5 percent in the first quarter of this year to over 8 percent for 2004 as a whole. Rapid gains in labor productivity have helped push up corporate profits by enabling firms to produce more without adding new capital or hiring new workers. Declining prices for some goods and competition from lower-cost imports have worked against improved profitability, but the recent decline in the value of the dollar should further boost profits in the near term.

Some analysts are concerned that businesses' obligations to their workers, in the form of defined-benefit pension plans and health benefits, will severely undercut their profits in coming years.⁴ In March, the Pension Benefit Guaranty Corporation estimated that defined-benefit pension plans were underfunded by about \$300 billion.⁵ Losses stemming from a decline in the value of a pension plan's assets must be recognized on accounting statements over a five-year period.⁶ If corporations were to make up those losses over five years, annual pension fund contributions would increase by at most \$60 billion—which is a significant sum when compared with total profits in the corporate sector of \$900 billion. That \$300 billion estimate is uncertain, however, because the degree to which a pension plan is underfunded depends on a number of factors, including the value of its assets and interest rates. Although such obligations will lower profits, they will have no significant direct effect on either the national saving rate or the overall level of investment because the replace-

4. A defined-benefit plan promises a specific benefit in retirement, and the employer is responsible for accumulating sufficient funds to pay for it.

5. Statement of Steven A. Kandarian, Executive Director, Pension Benefit Guaranty Corporation, before the Senate Committee on Finance, March 11, 2003.

6. Corporations in financial distress may receive temporary funding waivers of those charges.

ment pension contributions will be invested in financial instruments.

Corporations' rapidly rising health care costs are less likely to hurt their profits. Health benefit costs rose by 9.3 percent between March 2002 and March 2003, whereas wages and salaries grew by only 3.0 percent. But the increase in such costs probably has a smaller effect on profits than underfunded defined-benefit pensions do because the rise in health costs is partly offset by lower growth of wages. Moreover, the recent rapid growth of health benefits is likely to moderate.

The Cost of Capital. The cost of capital fell over the first half of 2003 as equity markets rebounded following the end of major combat operations in Iraq and investors began to view the corporate sector as less prone to the risk of defaults. After stagnating at almost six-year lows before and during the hostilities in Iraq, the Standard & Poor's 500 Composite Index had topped its late-2002 levels by the end of July. The resulting hike in share prices has lifted the market's valuation of the corporate sector and helped reduce the cost of financing new investment through stock offerings.

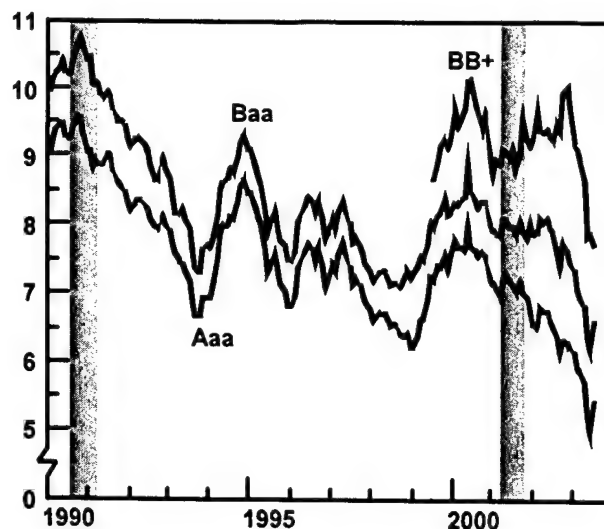
Similarly, recent improvements in the outlook for corporations have lowered the cost of firms' debt financing (see Figure 2-11). Yields on Baa (low-investment-grade) corporate bonds, for example, were about 40 basis points lower in July than they were in January. The yields on more-risky (below-investment-grade) bonds fell even further in the first half of the year. Even after the upturn that began in mid-June in the rates on 10-year Treasury notes, the resulting spreads (differences) between the yields on the notes and on highly rated investment-grade corporate debt—a measure of the perceived riskiness of the bonds—declined markedly from their first-quarter values, reflecting the end of major hostilities in Iraq and the waning of the effects of corporate accounting scandals. Spreads on low-investment-grade and speculative-grade debt, which represented almost half of outstanding corporate debt in the first quarter of 2003, also fell from their war-related peaks.⁷

7. The high investment grade includes all companies with a triple-A to single-A rating from Moody's rating agency; the low investment

Figure 2-11.

Interest Rates on Corporate Debt

(Percent)



Sources: Congressional Budget Office; Federal Reserve Board; Standard & Poor's Global Fixed Income Research.

Notes: A BB+ rated bond is a below-investment-grade bond of the highest quality.

The last data point is July 2003.

Businesses have used those improved conditions in the bond markets to bolster their balance sheets. By issuing long-term debt and using the proceeds to pay down short-term debt (in the form of commercial paper and bank loans), businesses have increased the average maturity of their liabilities and reduced the risks to their liquidity from relying on shorter-term funding. That increase in the overall maturity of firms' debt structures and the decline in rates have in turn reduced businesses' repayment obligations and net interest payments in the near term.

The conditions that businesses face when borrowing from banks have eased slightly over the first half of 2003 as compared with the previous two years. In the case of commercial and industrial (C&I) loans to large and medium-sized borrowers, fewer banks in the first two quarters tightened their lending standards or boosted the spreads

and speculative grades comprise, respectively, all Baa-rated and all Ba- to Caa-rated companies.

that they require relative to their cost of funds. In addition, the demand for loans among enterprises of all sizes—although still weak—steadied somewhat in the first half of 2003. At the same time, however, the level of C&I loans failed to turn up from the decline that began in early 2001.

The Inflation Outlook

CBO forecasts a mild uptick, relative to the first half of this year, in the core rate of inflation in the consumer price index for all urban consumers (CPI-U).⁸ Inflation is likely to be higher in the near term because of rising prices for imports and faster growth of unit labor costs. Import prices (excluding those for petroleum and computers) were almost flat during 2002, but they are likely to climb by more than 5 percent both this year and next. Similarly, unit labor costs fell by more than 1.5 percent over the four quarters of 2002 as a result of the unusual increase in productivity. But if productivity growth returns to a more usual pattern, unit labor costs this year and in 2004 are likely to grow by more than a percentage point. Another factor pointing to an increase in inflation is that year-over-year percentage changes in other indexes (specifically, the spot-price indexes for nonfood, nonenergy commodities such as metals and raw industrial products as well as the core intermediate materials producer price index) have generally trended upward since late 2001 and early 2002.

Core consumer inflation slowed to an annual rate of less than 1 percent in the second quarter of 2003 after increasing by 2.1 percent (measured on a fourth-quarter-over-fourth-quarter basis) in 2002 (see Figure 2-12). The category of homeowners' equivalent rent, which accounts for 28 percent of the core CPI-U, explains much of that deceleration.⁹ Inflation in homeowners' rents has declined steadily from over 4 percent in the first quarter of 2002 to 1 percent in the second quarter of 2003. Medical care inflation has also moderated, falling by almost 2 percentage points since the fourth quarter of 2002 after accelerating in every year since 1997.

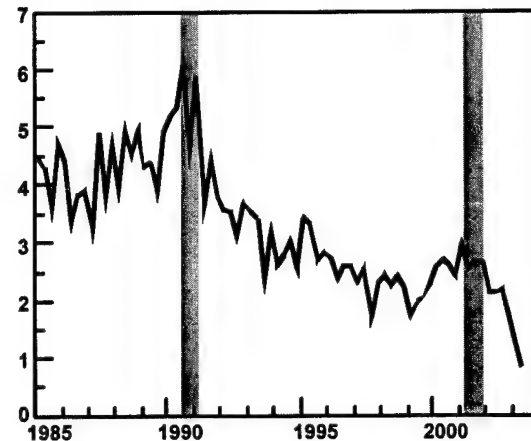
8. The core CPI-U is the CPI-U minus food and energy.

9. The Bureau of Labor Statistics defines homeowners' equivalent rent as the cost of the flow of services that "housing shelter" provides.

Figure 2-12.

Inflation in the Core Consumer Price Index

(Percentage change)



Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

Notes: The core consumer price index is the consumer price index for all urban consumers excluding food and energy.

The last data point is the second quarter of 2003.

The reduction in rental price inflation may be largely temporary. The Bureau of Labor Statistics (BLS) estimates the rental index for owner-occupied housing from a sample of rents for similar housing in the rental market. It subtracts utility costs from the rents to isolate the shelter component and then uses that component to impute the cost of the flow of services provided by owner-occupied housing. Utility costs rose in the early part of this year; but contractual rents tend to lag behind such costs, and the imputed growth of homeowners' equivalent rent was thus small. That growth is likely to be higher if energy prices stabilize or fall.

Notwithstanding the steady decline in the core measure in the first half of the year, quarter-to-quarter fluctuations in overall CPI-U inflation have broadly mirrored events in the energy markets. During the first quarter of 2003, uncertainty about the duration of the war in Iraq as well as political crises in Venezuela pushed crude oil prices well above \$30 per barrel. Natural gas prices also jumped

sharply. The result was an increase not only in energy costs in the CPI-U but also in overall CPI-U inflation, which rose at an annual rate of 3.9 percent in the first quarter after inching up by only 1.6 percent in 2002. Falling energy prices in the second quarter brought CPI-U growth to an annual rate of less than 1 percent for that period. Since early May, however, crude oil prices have picked up, although generally they remain below their prewar highs.

Uncertainty of the Forecast

CBO's two-year economic forecast represents its best estimate, under its baseline assumptions about fiscal policy, of the economy's most likely path in the near term. However, both CBO's experience and that of other forecasters suggest that the range of possible errors in forecasts is large.¹⁰ Economic developments may play out quite differently than CBO's forecast indicates. For example, the imbalances that developed in the late 1990s—low personal savings, past overinvestment by some firms, and increased dependence on foreign financing—may remain for some time. Growth may continue for a few quarters, but then households' desire to rebuild savings and foreigners' unwillingness to hold dollar-denominated assets may severely dampen economic activity. As a result, businesses' investment spending and real GDP growth might be weaker in 2004—and perhaps in later years—than CBO anticipates.

But a brighter scenario is also possible. Strong economic fundamentals, such as the recent robust growth in productivity, may set the stage for rapid growth with low inflation. Given a pronounced rise in investment and labor force participation, potential GDP between 2005 and 2013 may be higher as well. Such growth could eliminate any remaining imbalances without undercutting economic activity. The outlook for the federal deficit would also be better under such a scenario because the growth of tax revenues would then exceed CBO's baseline projections.

10. CBO regularly publishes the record of its economic forecasts on its Web site, www.cbo.gov, and compares its accuracy with that of other forecasters. That document will be updated in September 2003 to include forecasts for 2002.

A Comparison of Two-Year Forecasts

CBO's assessment of the economy's near-term outlook does not differ markedly from the consensus view of other forecasters. CBO's current two-year forecast is similar to the August *Blue Chip* consensus, an average of roughly 50 private-sector forecasts (see Table 2-3). CBO's estimates

Table 2-3.

Comparison of CBO, *Blue Chip*, and Administration Forecasts for Calendar Years 2003 and 2004

	Actual 2002	Forecast	
		2003	2004
Nominal GDP (Percentage change)			
<i>Blue Chip</i> consensus	3.6	3.9	5.1
CBO	3.6	3.7	5.3
Administration	3.6	4.0	5.0
Real GDP (Percentage change)			
<i>Blue Chip</i> consensus	2.4	2.3	3.7
CBO	2.4	2.2	3.8
Administration	2.4	2.3	3.7
GDP Price Index (Percentage change)			
<i>Blue Chip</i> consensus	1.1	1.6	1.5
CBO	1.1	1.5	1.4
Administration	1.1	1.6	1.2
Consumer Price Index ^a (Percentage change)			
<i>Blue Chip</i> consensus	1.6	2.2	1.8
CBO	1.6	2.3	1.9
Administration	1.6	2.3	1.7
Unemployment Rate (Percent)			
<i>Blue Chip</i> consensus	5.8	6.1	5.9
CBO	5.8	6.2	6.2
Administration	5.8	5.9	5.6
Three-Month Treasury Bill Rate (Percent)			
<i>Blue Chip</i> consensus	1.6	1.0	1.5
CBO	1.6	1.0	1.7
Administration	1.6	1.3	2.0
Ten-Year Treasury Note Rate (Percent)			
<i>Blue Chip</i> consensus	4.6	4.0	4.6
CBO	4.6	4.0	4.6
Administration	4.6	3.7	4.1

Sources: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board; Aspen Publishers, Inc., *Blue Chip Economic Indicators* (August 10, 2003); Office of Management and Budget, *Mid-Session Review: Fiscal Year 2004* (July 15, 2003).

a. The consumer price index for all urban consumers.

of nominal and real GDP growth are slightly lower in 2003 and slightly higher in 2004 than the *Blue Chip's*. In addition, CBO expects marginally higher unemployment and slightly higher CPI-U inflation in 2003 and 2004 than the consensus does. The two forecasts for short- and long-term interest rates are virtually identical.

In general, CBO's current two-year outlook also differs little from that of the Administration. In CBO's forecast for 2003, nominal and real GDP growth are slightly lower than in the Administration's; for 2004, CBO's estimates are slightly higher. Relative to the Administration's estimates, CBO's anticipate higher unemployment in both 2003 and 2004 and slightly higher CPI-U inflation (in 2004) and long-term interest rates (in 2003 and 2004).

In its midyear report to the Congress, the Federal Reserve presented its economic outlook as ranges—known as the central tendency—which include the majority of forecasts of the members of its Board of Governors and the presidents of the Federal Reserve Banks.¹¹ CBO's forecast falls within the Federal Reserve's central tendency for growth of real and nominal GDP for both 2003 and 2004. It is above the central tendency for unemployment for 2003 but within it for 2004. For inflation, CBO's forecast is above the Federal Reserve's central tendency for both years. The divergence can be explained in part by the use of different price measures.¹²

The Outlook Beyond 2004

To develop its medium-term (2005 through 2013) projections, CBO extended historical patterns in the factors that underlie the growth of potential GDP, such as the growth of the labor force, productivity, and the rate of national saving. In doing so, CBO does not attempt to forecast business-cycle fluctuations beyond the next two years. However, it does take the possibility of such fluctuations into account in developing the medium-term

trends by basing those trends on historical averages and growth rates, including periods of boom and recession. CBO's medium-term projections also incorporate the effects on potential output of recent fiscal policy (*see Box 2-3*).

Between 2004 and 2013, real GDP will grow at an average annual rate of 3 percent, CBO projects, which is slightly faster than the average annual growth rate of potential real GDP—2.8 percent. During the 2005-2013 period, real GDP will overtake potential GDP, closing the slight gap that remains between them at the end of 2004. Inflation, as measured by the CPI-U, will average 2.5 percent over the medium term, and the rate of unemployment will average 5.3 percent. CBO's projection for the rate on three-month Treasury bills averages 4.6 percent during the period, and the rate on 10-year Treasury notes averages 5.8 percent. Those projections are virtually identical to the estimates CBO published last January.

CBO's Projection of Potential Output

CBO projects that over the 2003-2013 period, growth of potential real output will average 2.9 percent per year, roughly the same rate that CBO projected last winter (*see Table 2-4 on page 47*). That estimate is derived from several offsetting changes in the projections of variables that CBO uses to calculate potential output, including the labor force, the capital stock, and total factor productivity (TFP).

In CBO's current projection, potential labor force growth is faster than it was in January's estimate, largely because of an upward revision to the historical data for the civilian labor force. In January 2003, BLS released significant revisions to data derived from the Current Population Survey (for example, data on the civilian population, labor force, and employment). Those revisions resulted from the Census Bureau's higher estimates of the size of the population, based largely on information from the 2000 census. The revisions did not appreciably affect the unemployment rate, but they raised the level of the labor force by about 1.7 million people in 2000 and by about 3 million people cumulatively in early 2003. Consequently, CBO has increased its estimate of the average growth of the labor force during the 1990s by about one-tenth of a percentage point since last winter's forecast.

11. See Federal Reserve Board of Governors, *Monetary Policy Report to the Congress* (July 15, 2003).

12. The Federal Reserve bases its projections of inflation on the price index for personal consumption, which has typically tended to rise at a slightly slower pace than the CPI-U.

Box 2-3.**How Recent Changes in Fiscal Policy Affect Potential Output**

The growth of potential output will be influenced by recent legislation, such as the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), the Job Creation and Worker Assistance Act of 2002 (JCWAA), the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), and various spending bills. (Potential output is the highest level of production that can persist for a substantial period without raising inflation.) The changes in spending primarily affect potential output through their impact on national saving and investment. Higher spending reduces national saving and tends to crowd out capital investment, which lowers productivity and slows economic growth. The Congressional Budget Office (CBO) estimates the degree of crowding out by using simple rules of thumb based on past relationships between budget variables, saving, and investment. But because the effects of the three recent tax laws are more complex, CBO estimated them separately, as this box describes. Overall, fiscal policy since 2001 has worked to increase aggregate demand (an effect reflected in CBO's short-term forecast). But it may also have a small negative impact on future potential output.

Various provisions in the tax laws affect the economy in complex ways: some increase gross domestic product (GDP), and others decrease it. For example, EGTRRA and JGTRRA reduce marginal tax rates on the income from labor and capital. (Marginal tax rates are those that apply to the last dollar earned.) Other things being equal, those lower rates encourage people to work and save more. Other provisions stimulate businesses to invest in capital goods in the near term. However, the laws also boost households' after-tax income, which encourages people to work less and consume more. The legislation's overall impact is determined by the relative magnitudes of those offsetting forces.¹

1. CBO used a similar approach in *An Analysis of the President's Budgetary Proposals for Fiscal Year 2004*, published in March 2003. For details on the methodology used in the analysis, see Congressional Budget Office, *How CBO Analyzed the Macroeconomic Effects of the President's Budget* (July 2003).

How CBO Estimated the Effects of the Tax Laws

Consensus among economists is lacking about the appropriate model and underlying assumptions to use in estimating the effects of taxes on the economy. To address that uncertainty, CBO examined those effects using two different models. The first was a microsimulation model, based on a large sample of taxpayers' returns, that reflects the major provisions of the individual income tax code and incorporates the assumption that workers will respond to changes in their after-tax wages and income as they have in the past. That model does not pick up effects that might arise from what people do when they expect changes in future tax rates or other fiscal policies. By contrast, the second approach, sometimes termed forward-looking, focuses on the possibility that people plan ahead and choose how much to work and spend on the basis of current and future after-tax wage rates, interest rates, and income, among other things.²

CBO also used two different approaches to estimate the effects of tax policy on capital investment. One method included the assumption, based on historical evidence, that a budget deficit of \$1 crowds out 36 cents of private investment, on average.³ The other method estimated

2. For the labor-supply assumptions used in the first model, see Congressional Budget Office, *Labor Supply and Taxes* (January 1996); and Chinhui Juhn, Kevin M. Murphy, and Robert Topel, "Current Unemployment, Historically Contemplated," *Brookings Papers on Economic Activity*, no. 1 (2002), pp. 117-125. For a description of the second model, see Shinichi Nishiyama and Kent Smetters, *Consumption Taxes and Economic Efficiency in a Stochastic OLG Economy*, CBO Technical Paper 2002-6 (December 2002).

3. That assumption is based on two pieces of evidence about the historical relationships between budget deficits, national saving, and investment. First, increasing the deficit by a dollar reduces national saving, on average, by 60 cents (because private saving increases); and second, a decline of 60 cents in national saving reduces domestic investment, on average, by only 36 cents (because capital flows in from abroad).

Box 2-3.**Continued**

tax policy effects by simulating how forward-looking firms and households respond to changes in marginal tax rates and to other policies.

Effects of the Tax Legislation

The revenue measures enacted since 2001 will boost labor supply by between 0.4 percent and 0.6 percent from 2004 to 2008 and by up to 0.2 percent from 2009 to 2013, according to estimates from the two models. Those increases stem from the legislation's reduction in marginal tax rates on labor income, which drop by an average of 1.9 percentage points from 2004 to 2008 and 0.7 percentage points from 2009 to 2013. The rise in labor supply and the fall in marginal rates are smaller, on average, during the 2009-2013 period because the marginal rate cuts expire at the end of 2010, eliminating their positive effect on labor supply.

But the tax legislation will probably have a net negative effect on saving, investment, and capital accumulation over the next 10 years. That outcome derives from the laws' provisions that boost private consumption because, in the long run, they reduce the pool of funds available for capital investment in business equipment, structures, and housing. According to the models, the legislation will reduce national saving by between 3 percent and 6 percent from 2004 to 2008 and between 3 percent and 5 percent from 2009 to 2013.⁴

The tax laws' net effect on potential output is uncertain during the first five years of the 2004-2013 projection period but will probably be negative in the second five years. However, that impact is small, especially com-

pared with the overall uncertainty of the forecast. According to the models, the legislation could boost the level of potential GDP by as much as 0.3 percent or reduce it by as much as 0.1 percent over the years 2004 to 2008. From 2009 to 2013, it could reduce the level of potential GDP by about 0.4 percent. Potential GDP is reduced in the later years because the cuts in marginal tax rates are scheduled to expire at the end of 2010 and the negative effect of higher consumption on investment is compounded over time.

Effects of Alternative Financing Assumptions

For its simulations, the forward-looking model requires that the ratio of debt to GDP be stable in the long run. That means that policies that reduce revenues must eventually be financed by increasing revenues or cutting spending. In general, the estimated impact of tax policies depends on what offsetting policies households are assumed to expect. Following the same strategy that it used in its recent analysis of the President's 2004 budgetary proposals, CBO estimated fiscal policy effects under different financing assumptions. Because most of the tax legislation enacted since 2001 is scheduled to expire by 2011, the particular assumption about expected financing that is used in the model makes relatively little difference to the estimates. However, alternative assumptions about how policies enacted in 2001 to 2003 might affect future decisions within the 10-year period could substantially influence the results.

**Effects of Different Expectations
About Tax Law Expirations**

All of the major tax legislation enacted since 2001 expires by 2011 (according to the so-called sunset provisions), and some provisions expire earlier. Thus, people's expectations about those expirations during CBO's 10-year projection period (2004 through 2013) affect its economic projections. For estimates using its forward-looking approach, CBO assumed not only that those sunsets would take place according to current law but also that people would expect them to occur in that way. Of course, people might view the path of future fiscal policy differently. For example, people might expect

4. JGTRRA includes two provisions—reductions in the rates of taxation on corporate dividends and capital gains—that could in principle increase the fraction of investment allocated to the corporate sector relative to tax-advantaged sectors such as housing, thereby increasing economic efficiency and output. However, those rate cuts are scheduled to expire at the end of 2008. Therefore, CBO estimates that those provisions will have little effect on the allocation of investment, which can produce returns over many years.

Box 2-3.**Continued**

the tax legislation to be permanently extended rather than allowed to expire. Alternatively, people might expect sunsets for some, but not all, of the provisions. Finally, as noted earlier, the overall impact depends as well on people's expectations about any modifications to fiscal policy that might be needed outside the 10-year projection window to ultimately stabilize debt relative to GDP.

If people expected policymakers to make the tax legislation permanent and to finance it by cutting government spending on goods and services in 2014, output would be 0.2 percent less from 2004 to 2008, by CBO's estimates, than it would have been had people expected the laws to expire as scheduled. GDP would be lower for two reasons. First, because people expected low marginal tax rates on labor to persist, they would have had less reason to work more in anticipation of the sunset.

CBO carried the faster trend growth of the 1990s forward into its projection, estimating that the potential labor force would grow at a rate of 1.0 percent, up a tenth of a percentage point from last winter's estimate. The projection of the potential labor force also includes the effects of JGTRRA, which, among other changes, accelerated the marginal rate cuts previously scheduled for 2006, as enacted in EGTRRA. However, since JGTRRA preserved the sunset provisions of the earlier law, its effects on labor supply are expected to disappear before the end of the projection period and thus make no contribution to the final level of the potential labor force or its 10-year growth rate.

Potential hours worked will grow at a slightly faster pace during the 2003-2013 period than the rate noted in last winter's projection, or by about 1.1 percent on average, CBO projects. Typically, the upward revision in the projection for the potential labor force would invoke a corresponding revision to the projection for hours worked, which is the key measure of labor input used in production. But BLS also revised the historical data for hours worked, shifting the series sharply downward during 2001

Second, the reduction in government consumption in 2014 would increase the resources available for private consumption. That would tend to lead people to work and save less in earlier years.

By contrast, if people viewed the tax policies as permanent and assumed that they would be financed by increased taxes that fell equally on everyone (both workers and nonworkers), CBO estimates that output could be 0.2 percent higher than it would have been had people expected the policies to expire as scheduled. Output would be higher under that assumption largely because older workers and retirees would reduce their consumption and save more in anticipation of the taxes to be imposed in 2014. An assumption that financing would entail adjustments to either income taxes or transfer payments would produce similar results.

and 2002.¹³ Those revisions to the data on hours lowered the growth rate of potential hours worked during the 1990-2002 period and partially offset the effect of the upward revision to the potential labor force.

CBO projects that capital accumulation will proceed at a 3.8 percent pace, on average, during the 2003-2013 period, or about 0.4 percentage points slower than in the winter forecast. Slower capital accumulation is one consequence of the worsening outlook for the federal budget, which will reduce the national saving rate and decrease the pool of funds available for business investment. The rate of national saving will average 15 percent of GDP during the 10-year projection period, CBO estimates, down from 17 percent last winter.

13. BLS released its revisions to the hours data after CBO's economic forecast had been completed; hence, the forecast includes an estimate of the revised data. The changes in hours worked reflect the recent benchmark revisions to payroll employment, which indicated that total hours worked during 2001 and 2002 declined by more than had previously been thought.

Table 2-4.**Key Assumptions in CBO's Projection of Potential GDP**

(By calendar year, in percent)

	Average Annual Growth					Projected Average Annual Growth			
	1951-1973	1974-1981	1982-1990	1991-1995	1996-2002	Total, 1951-2002	2003-2008	2009-2013	Total, 2003-2013
Overall Economy									
Potential GDP	3.9	3.3	3.0	2.6	3.3	3.4	3.0	2.7	2.9
Potential Labor Force	1.6	2.5	1.6	1.3	1.3	1.7	1.2	0.7	1.0
Potential Labor Force Productivity ^a	2.2	0.8	1.3	1.3	2.0	1.7	1.8	2.0	1.9
Nonfarm Business Sector									
Potential Output	4.0	3.6	3.1	3.0	3.8	3.7	3.4	3.1	3.2
Potential Hours Worked	1.3	2.2	1.5	1.4	1.4	1.5	1.3	0.8	1.1
Capital Input	3.7	4.4	3.6	2.5	4.9	3.8	3.5	4.1	3.8
Potential Total Factor Productivity	2.0	0.8	0.9	1.2	1.3	1.4	1.3	1.3	1.3
Potential TFP excluding adjustments	2.0	0.7	1.0	1.1	1.1	1.4	1.1	1.1	1.1
TFP adjustments	0	0	0	0	0.2	0	0.2	0.2	0.2
Computer quality	0	0	0	0	0.1	0	0.1	0.1	0.1
Price measurement	0	0	0	0	0.1	0	0.1	0.1	0.1
Contributions to Growth of Potential Output (Percentage points)									
Potential hours worked	0.9	1.6	1.1	1.0	1.0	1.1	0.9	0.6	0.8
Capital input	1.1	1.3	1.1	0.8	1.5	1.1	1.1	1.2	1.1
Potential TFP	<u>2.0</u>	<u>0.8</u>	<u>0.9</u>	<u>1.2</u>	<u>1.3</u>	<u>1.4</u>	<u>1.3</u>	<u>1.3</u>	<u>1.3</u>
Total Contributions	4.0	3.6	3.1	2.9	3.8	3.7	3.3	3.1	3.2
Memorandum:									
Potential Labor Productivity ^b	2.7	1.4	1.6	1.5	2.3	2.1	2.0	2.2	2.1

Source: Congressional Budget Office.

a. The ratio of potential GDP to the potential labor force.

b. The estimated trend in the ratio of output to hours worked in the nonfarm business sector.

In CBO's projections, potential total factor productivity grows at an average annual rate of 1.3 percent during the projection period, about a tenth of a percentage point faster than in last winter's projection. Since TFP is calculated as a residual—it is defined as the growth of output that remains after subtracting the contributions made by the growth of hours worked and of capital accumulation—the downward revision to the recent historical data for hours worked caused an upward revision to the historical estimate of TFP. That change, in turn, raised the

growth rate of potential TFP during the 1990-2002 period and in the projection.

Unemployment, Inflation, and Interest Rates

The rise in inflation expected in the two-year forecast period will taper off during the medium term, CBO projects; inflation will average 2.5 percent in the CPI-U and 2.1 percent in the GDP price index. Those rates are identical to the assumptions used in CBO's January forecast. In general, CBO assumes that inflation is determined

by monetary policy in the medium term and that the Federal Reserve will seek to maintain the underlying rate of CPI-U inflation near 2.5 percent, on average.

The difference between the projected rates of growth of the CPI-U and the GDP price index affects CBO's projections of the federal budget. Many spending programs and all income tax brackets are indexed to the CPI-U, whereas taxable income is more closely related to growth in the GDP price index. Hence, for a given rate of inflation in the CPI-U, a higher rate of GDP inflation results in a lower projection of the federal deficit. CBO expects that the wedge between the two measures of inflation will average 0.4 percentage points during the 2005-2013 period, which equals the average wedge between the two rates over the 1990-2002 period.

CBO estimates that over the latter part of the medium term, the unemployment rate will average about 5.2 percent, down from its average projected levels of 6.2 percent in 2004 and 5.7 percent in 2005. In projecting the unemployment rate, CBO uses the nonaccelerating inflation rate of unemployment (NAIRU) as a benchmark. When the gap between GDP and potential GDP has closed completely, the difference between the unemployment rate and the NAIRU is assumed to close as well.

CBO's medium-term projections for interest rates are almost unchanged since January. For most of the 2005-2013 period, the rate on three-month Treasury bills is expected to average 4.9 percent, while the rate on 10-year Treasury notes will average 5.8 percent. Those rates combine the projection for CPI-U inflation and a projection for real interest rates. CBO estimates that the real rate on three-month Treasury bills will average 2.4 percent during the latter years of the projection period and the real rate on 10-year Treasury notes will average 3.3 percent. CBO's projection for real interest rates is based on analyses of historical averages of those rates and historical trends in the real return to capital.

Taxable Income

CBO's baseline revenue projections are closely connected to its projections of national income. Because different categories of income are taxed at different rates, and some are not taxed at all, the projected distribution of income

among its various components is a central factor in CBO's budget projections. The categories of corporate profits and wage and salary disbursements are particularly significant because they are taxed at the highest rates.

Two of the various NIPA measures of corporate profits are important for the forecast. Book profits, or before-tax profits, is the measure most closely related to the profits that companies report to the Internal Revenue Service. By contrast, the economic profits measure is designed to reflect the valuation of inventories and the rates of depreciation that economists believe more truly represent the current value of inventories and the economic usefulness of the capital stock. The difference between the two measures is affected by changes in the tax code. Corporations are allowed by law to value inventories and depreciate assets at certain rates. The book measure of profits is designed to reflect those statutory requirements, whereas the economic measure is not.

The outlook for book profits—the closest approximation in the NIPAs to the profits on which corporations pay tax—is likely to be dominated by statutory provisions that affect how companies can depreciate their assets for tax purposes. The partial-expensing provisions of JCWAA and JGTRRA that expire at the end of 2004 allow firms to depreciate some of their capital stock much more rapidly than the rate at which the economic usefulness of that capital deteriorates. Those provisions are expected to lower taxable profits by nearly \$150 billion in 2003 and \$200 billion in 2004, because companies can take the extra depreciation in those years. Conversely, in 2005 and after, taxable profits will be increased—by about \$125 billion in 2005 and declining amounts in subsequent years—because the extra depreciation taken in 2003 and 2004 will no longer be available to firms.

The underlying trend of profits is hard to discern because of the large changes in depreciation, but CBO's projection implies a relatively sanguine outlook for economic profits, a measure that looks past those tax-induced variations. Economic profits were 7.5 percent of GDP in 2002, a level that reflects the effects of the recession. CBO's projection anticipates that in the latter years of the projection period, the average GDP share of economic profits will exceed 8.3 percent, the average share during the 1990s.

Wages and salaries—the other NIPA income category that is particularly important for revenue forecasting—are currently very close to their 20-year average share of GDP. CBO's estimates keep wages and salaries close to that share (47.4 percent) throughout the short-term forecast and the medium-term projection. The projection incorporates

an acceleration in the growth of fringe benefits—specifically, employers' contributions to health insurance and pension plans—which implies that the GDP share of total labor compensation, currently somewhat below its 20-year average, will rise toward that average share over the 10-year period.

A

A Comparison of CBO's and OMB's Baselines

The Administration's Office of Management and Budget (OMB) published its annual *Mid-Session Review* of the President's budget on July 15. In that report, OMB updated its baseline budget projections and its economic assumptions through 2008. This appendix compares OMB's baseline projections with those of the Congressional Budget Office (CBO).

For 2003, CBO estimates a deficit of \$401 billion—\$54 billion less than OMB's projection of a \$455 billion deficit. In 2004, the projected outcome is reversed, with CBO estimating a higher deficit than OMB (\$480 billion versus \$458 billion). For 2004 through 2008, CBO's projected cumulative deficit of \$1.4 trillion is about 50 percent higher than OMB's estimate of \$949 billion (see *Table A-1*). That difference occurs largely because OMB, contrary to the provisions of the Balanced Budget and Emergency Deficit Control Act of 1985, did not extrapolate into future years \$89 billion in appropriations for 2003 (mostly for the Department of Defense). If OMB had extended those appropriations, the two agencies' baseline projections of deficits would differ by only \$56 billion over the five-year period, an amount equivalent to about 0.5 percent of projected revenues or outlays over that period. Relative to OMB's five-year projections of revenues and outlays, CBO's would be higher by \$99 billion and \$155 billion, respectively.

Revenues

CBO projects that revenues will be \$14 billion higher than OMB estimates for the current year and \$31 billion higher for next year. Revenues for the 2004-2008

period are about 1 percent greater in CBO's baseline than in OMB's.

Most of the differences in the two agencies' projections of revenues for 2003 and 2004 are explained by technical factors—that is, differences in the estimated amount of revenue generated by a given macroeconomic projection. For 2003 and 2004, CBO and OMB project very similar levels of nominal gross domestic product (GDP). CBO's projection of revenues in those years is higher mainly because OMB reduced its estimate of revenues beyond what the economic and tax models forecast by \$15 billion in 2003 and by \$30 billion in 2004 to reflect uncertainty.

Differences in economic assumptions underlie CBO's higher revenue projections after 2004. CBO projects higher levels of nominal GDP and taxable income than OMB does from 2005 through 2008. Both profits and nonwage personal income, especially interest income, are greater in CBO's forecast.

Outlays

CBO expects total outlays in 2003 to be \$40 billion lower than OMB does. About 80 percent of that difference is attributable to discretionary spending, and that gap is almost evenly divided between defense and non-defense programs. For the 2004-2008 period, CBO projects \$594 billion more in total outlays than OMB does. Nearly \$440 billion of that difference flows from the agencies' treatment of discretionary spending after the current year and the higher debt-service costs that result.

Table A-1.**Comparison of CBO's August 2003 Baseline and OMB's July 2003 Baseline**

(In billions of dollars)

	2003	2004	2005	2006	2007	2008	Total, 2004- 2008
CBO's August 2003 Baseline							
Revenues	1,770	1,825	2,064	2,276	2,421	2,564	11,150
On-budget	1,247	1,276	1,487	1,667	1,780	1,889	8,099
Off-budget	523	549	577	609	641	675	3,051
Outlays							
Discretionary	826	900	931	948	969	996	4,745
Mandatory	1,188	1,250	1,289	1,333	1,401	1,482	6,755
Net interest	<u>157</u>	<u>155</u>	<u>184</u>	<u>220</u>	<u>255</u>	<u>282</u>	<u>1,096</u>
Total	2,170	2,305	2,404	2,501	2,624	2,761	12,595
On-budget	1,809	1,920	2,007	2,092	2,201	2,323	10,543
Off-budget	361	385	398	409	423	438	2,052
Deficit (-)	-401	-480	-341	-225	-203	-197	-1,445
On-budget	-562	-644	-520	-425	-421	-434	-2,444
Off-budget	162	164	179	199	219	237	999
OMB's July 2003 Baseline							
Revenues	1,756	1,794	2,063	2,267	2,403	2,525	11,051
On-budget	1,233	1,248	1,479	1,657	1,761	1,853	7,999
Off-budget	523	546	583	610	642	671	3,053
Outlays							
Discretionary ^a	858	841	839	849	867	880	4,275
Mandatory	1,196	1,247	1,280	1,321	1,387	1,465	6,700
Net interest	<u>156</u>	<u>165</u>	<u>184</u>	<u>207</u>	<u>227</u>	<u>241</u>	<u>1,025</u>
Total	2,210	2,252	2,304	2,377	2,481	2,587	12,001
On-budget	1,846	1,869	1,906	1,970	2,061	2,154	9,961
Off-budget	364	383	397	407	420	433	2,040
Deficit (-)	-455	-458	-241	-110	-78	-62	-949
On-budget	-614	-621	-427	-313	-300	-300	-1,962
Off-budget	159	164	186	203	222	238	1,013

(Continued)

Discretionary Spending

For 2003, CBO anticipates \$17 billion less in defense spending and \$15 billion less in nondefense spending than OMB does. In both cases, the difference between the agencies' estimates hinges on the rate of spending each expects. On the basis of its analysis of spending so far this year, CBO expects the money provided in the

Emergency Wartime Supplemental Appropriations Act, 2003 (Public Law 108-11), to be spent more slowly than OMB does. Likewise, CBO anticipates slower spending of appropriations for international assistance programs and for several departments, including Homeland Security, Education, Agriculture, Transportation, and State.

Table A-1.**Continued**

(In billions of dollars)

	2003	2004	2005	2006	2007	2008	Total, 2004- 2008
Difference (CBO's Baseline Minus OMB's)							
Revenues	14	31	1	9	18	40	99
On-budget	14	28	8	10	18	36	101
Off-budget	*	3	-7	-2	*	4	-2
Outlays							
Discretionary ^a	-32	59	92	100	102	116	470
Mandatory	-8	4	9	11	13	17	54
Net interest	*	-10	-1	13	28	41	70
Total	-40	53	101	124	143	174	594
On-budget	-37	51	100	122	140	169	582
Off-budget	-3	2	*	2	3	5	12
Deficit	54	-22	-99	-115	-125	-135	-496
On-budget	52	-23	-93	-111	-121	-134	-481
Off-budget	3	1	-7	-4	-3	-1	-14
Memorandum:							
Difference in Baseline							
Deficits Excluding							
Projection of \$89 Billion							
in Appropriations ^a	54	20	-20	-19	-18	-18	-56

Sources: Congressional Budget Office; Office of Management and Budget.

Notes: * = between -\$500 million and \$500 million.

Since the 1990s, lawmakers generally have used a 10-year period as the basis for making baseline budget projections. However, in its *Mid-Session Review*, OMB provided estimates for only a five-year period. To directly compare CBO's estimates with OMB's, this table shows both agencies' projections through 2008. (See Chapter 1 for CBO's 10-year baseline budget projections.)

a. OMB does not extend nearly \$79 billion appropriated in the Emergency Wartime Supplemental Appropriations Act, 2003 (Public Law 108-11), and \$10 billion in defense funding that was part of the omnibus appropriations act for 2003 (P.L. 108-7).

CBO's estimate of discretionary outlays for the 2004-2008 period exceeds OMB's by \$470 billion. Most of that difference is attributable to OMB's use of a different methodology than the one specified in the Deficit Control Act. According to that law, baseline projections of discretionary spending for future years are to be extrapolated from budget authority appropriated for the current year, adjusted for inflation and other factors. Following that specification, CBO's baseline extends total 2003 budget authority for the 2004-2013

period.¹ In contrast, OMB's baseline does not project into future years the \$79 billion appropriated in P.L. 108-11 and \$10 billion in defense funding (for the war on terrorism) that was provided by the omnibus appropriations act for 2003 (P.L. 108-7). The differing treatment of the \$89 billion accounts for \$397 billion of the

1. CBO projects revenues and outlays for the current year and the next 10 years. OMB's projections cover the current year and the following five years.

difference between the two agencies' projections of discretionary outlays.

Without extrapolating the \$89 billion of budget authority into future years, CBO's projection of discretionary outlays through 2008 would have exceeded OMB's by \$72 billion (or about 2 percent). Some of that difference reflects outlays that OMB estimates will occur in 2003 but that CBO expects to be spent in later years. Much of the remainder stems from the slightly higher inflation rates used by CBO to project discretionary budget authority.

Mandatory Spending

For mandatory outlays in 2003, CBO's estimates are lower than OMB's by \$8 billion. About \$3 billion of that difference can be traced to Medicaid outlays, which CBO estimates will be lower, and to outlays from the September 11th victims' compensation fund, which CBO projects will be disbursed more slowly.

CBO projects about \$54 billion more in mandatory outlays over the 2004-2008 period than OMB does, a difference of roughly 1 percent. Estimates for certain

programs differ noticeably, though. For example, CBO projects \$30 billion (or 2 percent) more in spending for Medicare over the five-year period than OMB does; for Medicaid, CBO's estimate over the five years is \$39 billion (or 4 percent) lower than OMB's. Outlays for unemployment benefits are nearly \$20 billion higher under CBO's baseline, largely because of moderately higher projections of the unemployment rate and average weekly benefits.

Net Interest

CBO's projection of net interest exceeds that of OMB for 2004 through 2008 by \$70 billion, primarily because of CBO's higher projection of deficits for those years. If CBO adopted OMB's treatment of discretionary spending, that difference would narrow to \$28 billion, most of which would be attributable to higher interest rates in CBO's economic forecast toward the end of the five-year period. For 2006 through 2008, CBO's projection of the three-month Treasury bill rate ranges from 30 basis points to 50 basis points higher than OMB's, and its projection of the 10-year Treasury note rate exceeds OMB's by between 50 basis points and 100 basis points (a basis point is one-hundredth of a percentage point).

B

The Treatment of Federal Transactions in the National Income and Product Accounts

The fiscal transactions of the federal government are reported in two major sets of accounts that are conceptually quite different. The presentation generally discussed in the press and used by executive branch agencies and the Congress (and the one followed in Chapter 1 of this report) is the *Budget of the United States Government*, as reported by the Office of Management and Budget. It focuses on cash flows—revenues and outlays, or the collection of taxes and fees and the disbursement of cash for the various federal functions. The goal of the budget is to provide information to assist lawmakers in their policy deliberations, to control federal activities, and to help the Department of the Treasury in managing its cash balances and in determining its borrowing needs.

The national income and product accounts (NIPAs) also report the federal government's transactions, but with different goals. The NIPAs, which are produced by the Bureau of Economic Analysis (BEA) at the Department of Commerce, are intended to provide a comprehensive measure of current production and related income within the United States.¹ A well-known measure of current production in the NIPAs is gross domestic product, or GDP. The accounts, which are used extensively in macroeconomic analysis, divide the economy into four major

sectors—business, household, government, and the rest of the world (the foreign sector), each with its own accounts.² The federal sector, which is the focus of this appendix, is one component of the government sector (the state and local sector is the other component).³ Because the goals of the NIPAs differ from those of the budget, the two accounting systems treat some government transactions quite differently. The overall results, however, do not differ substantially. Over the 2004-2013 period, the receipts and expenditures in the NIPAs, as projected by the Congressional Budget Office, exceed the corresponding budget totals by about 1 percent.

Conceptual Differences Between the NIPAs' Federal Sector and the Federal Budget

The budget of the federal government is best understood as an information and management tool. It focuses mostly on cash flows, recording for each period the inflow of

1. For other discussions of the NIPAs, see Bureau of Economic Analysis, *Survey of Current Business* (March 2003); and *Budget of the United States Government, Fiscal Year 2004: Analytical Perspectives*.

2. Some accounts in the NIPAs, such as the gross saving and investment account, focus on components of GDP or national income, rather than on a specific sector, and bring together relevant information from all four sectors.
3. The treatment of state and local governments' transactions in the NIPAs closely resembles that for the federal government. In large part, the NIPAs rely on state and local budget data collected by the Bureau of the Census, which—like the federal budget data—are reported on a cash basis.

revenues and the outflow of spending.⁴ The main period of interest in the budget accounts is the fiscal year, which runs from October through September. There are a few exceptions to the general rule of recording transactions on a cash basis, but they are intended to improve the usefulness of the budget as a tool for making decisions. For example, when the federal government makes direct loans or provides loan guarantees (as with student loans), simply tracking flows of cash would give a misleading view of costs, so (under what is known as credit reform) the budget records the estimated subsidy costs at the time that the loans are made, along with administrative costs (on a cash basis).

The federal sector of the NIPAs has none of the planning and management goals of the budget. Instead, it is focused on displaying how the federal government fits into a general framework that describes current production and income within specific periods, and what happens to that production and income. The main periods of interest for the NIPAs are calendar years and calendar quarters, although approximate totals for fiscal years can be derived from the quarterly numbers.

From the point of view of the NIPAs, the federal government is both a producer and a consumer: its workforce produces government services, and its purchases consume some of the nation's production. In addition, the federal government affects the resources available to the private sector, through its taxes and transfers. The job of the NIPAs is to record all of those activities in a consistent manner.

The federal sector of the NIPAs concentrates on the last two of those functions. It tracks how much the government spends on consumption purchases, and it records the transfer of resources that occurs through taxes, payments to beneficiaries of federal programs, and federal

interest payments. The federal sector does not track the government in its role as a producer.⁵

Differences in Accounting for Major Transactions

The accounting differences between the NIPAs and the federal budget stem from the conceptual differences discussed above. In attempting to properly incorporate federal transactions into the framework used to determine GDP, the NIPAs reflect judgments about the best treatment of transactions such as government investment, sales and purchases of existing assets, federal credit, and activities that resemble those of businesses, along with transactions involving U.S. territories. In some cases, the appropriate treatment may be to exclude the transaction entirely from the NIPAs or to move it from the federal sector to another place in the NIPAs. In other cases, the appropriate treatment may involve recording an offsetting (negative) outlay as a receipt instead or adjusting the timing of a federal transaction to better match the timing of related production or income flows.⁶

4. Some budget accounts distinguish between on-budget and off-budget transactions and between federal funds and trust funds. Those distinctions do not affect the overall budget balance, have no economic implications, and do not appear in the NIPAs.

5. Later this year, in its comprehensive revisions of the NIPAs, BEA plans to explicitly recognize the services produced by the government as part of GDP and to treat government purchases of goods and services (which are included in the GDP of the business sector) as intermediate inputs to the production of government services. Those changes will shift the composition of GDP away from goods and toward services, because the government's purchases of goods will be reclassified as inputs to a new component of GDP, government services. Although that new treatment will change the relative importance of different components of GDP, it will not change the transactions now reported in the NIPAs' federal sector. By contrast, several other revisions will change the depiction of those transactions. For example, federal interest receipts will be moved from offsetting outlays (on the "uses" side of the government receipts and expenditures account) to receipts (on the "sources" side of the account). Also, government receipts will be augmented by the current surpluses of government enterprises, which now are recorded as offsets to government expenditures.

6. The resulting differences between the numbers in the NIPAs and the budget are sometimes categorized into three groups: coverage, netting, and timing differences. While all three can affect total revenues or outlays, netting differences have no effect on the deficit or surplus, because they affect revenues and outlays equally.

Measurement of National Saving

Several conventions in the NIPAs are intended to better portray the federal government's contribution to national saving. Two major departures from the budget are the treatment of federal investment spending (for such things as ships, tanks, and office buildings), and the treatment of federal employee retirement programs.

The government's investment spending is not included in the federal sector of the NIPAs but instead is counted along with private investment spending in the gross saving and investment account. The federal sector of the accounts does, however, record a depreciation charge for the current services of capital created by past government investment. In the budget, depreciation, or consumption of fixed capital, is not tracked. In *Table B-1*, this difference in the coverage by the NIPAs and the budget is shown under "Treatment of investment and depreciation."

The transactions of federal employee retirement programs are also handled very differently in the budget and the NIPAs. In the budget, employees' contributions to their federal retirement are recorded as revenues, while agencies' contributions on behalf of their employees (as well as interest payments from the Treasury to trust funds) have no overall budgetary effect because they are simply transfers of funds between two government accounts.⁷ Benefit payments to retirees are recorded as outlays in the budget. By contrast, in the NIPAs, the aim is to make the measurement of saving by the federal government more consistent with that of the private sector. Therefore, the NIPAs treat some of the transactions of federal retirement plans, except for the Railroad Retirement Fund, as part of the household sector.⁸ The receipts from federal employers' and employees' retirement contributions (and the interest earned by retirement accounts) are considered part

of the personal income of workers and thus are not recorded as federal transactions (receipts or negative expenditures). Also, benefit payments to retirees are not recorded as federal expenditures, because they are treated as transfers from pension funds within the household sector. Some transactions, however, remain part of federal expenditures even though the corresponding receipts are recorded in the household sector. Namely, as part of compensation, the government's payments to its workers' retirement are counted as federal expenditures, as is the interest paid to federal retirement accounts. The different treatment of retirement contributions by federal employees shows up in *Table B-1* under "Receipts"; the different treatment of contributions by federal employers, interest earnings, and benefit payments is shown under "Expenditures."

Capital Transfers and Exchanges of Existing Assets

The NIPAs measure current production and income rather than transactions involving existing assets. Thus, the NIPAs exclude capital transfers and asset exchanges, while the budget generally includes them. Capital transfers in the NIPAs include estate and gift taxes (which are taxes on private capital transfers), investment subsidies to businesses, and investment grants to state and local governments (for highways, transit, air transportation, and water treatment plants). Exchanges of existing assets include federal transactions for deposit insurance, and sales and purchases of government assets (including assets that are not produced, such as land and the radio spectrum). In *Table B-1*, those differences between the NIPAs' federal sector and the budget accounts show up on the revenue side as estate and gift taxes and on the outlay side as capital transfers and lending and financial adjustments.

Credit Programs

The budget is not affected by all of the transactions associated with federal loans and loan guarantees—just the administrative costs and the estimated cost of subsidies. Loan disbursements, loan repayments, and interest are reported in what are termed financing accounts, which have no effect on revenues or outlays.

Like the budget, the NIPAs record the administrative costs and generally exclude other cash flows considered exchanges of existing assets or financial and lending transactions unrelated to current production. Unlike the bud-

7. In the budget, contributions by an agency for its employees' federal retirement are outlays for that agency and are offsetting receipts (negative outlays) for the trust funds. Thus, those intra-governmental transfers result in no net outlays or receipts for the total budget. That treatment is the same for Social Security contributions by the federal government for its employees.

8. Social Security contributions and benefit payments for both private and government employees are kept in the federal sector as receipts and expenditures rather than moved to the household sector.

Table B-1.

Relationship of the Budget to the Federal Sector of the National Income and Product Accounts

(In billions of dollars)

	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Receipts												
Revenues (Budget)*	1,853	1,770	1,825	2,064	2,276	2,421	2,564	2,723	2,880	3,165	3,430	3,634
Differences												
Coverage												
Contributions for government employees' retirement	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-3	-3
Estate and gift taxes	-27	-22	-23	-22	-25	-23	-24	-26	-19	-22	-40	-43
Geographic adjustments	-4	-4	-4	-4	-5	-5	-5	-5	-5	-6	-6	-6
Universal Service Fund receipts	-5	-5	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7
Subtotal, coverage	-40	-35	-38	-37	-40	-38	-40	-42	-35	-38	-56	-60
Timing shift of corporate estimated tax payments	-23	6	*	-7	0	0	0	0	0	0	0	0
Netting												
Medicare premiums	26	28	32	34	37	40	43	46	50	54	59	64
Deposit insurance premiums	*	*	*	*	1	1	1	1	2	2	2	2
Government contributions for OASDI and HI for employees	12	13	13	14	15	16	17	18	19	20	21	23
Other	9	13	10	9	8	8	7	6	6	4	3	2
Subtotal, netting	47	54	55	58	61	65	69	72	77	81	85	90
Other	69	22	6	4	1	-2	2	1	2	*	1	1
Total Differences	53	48	24	18	22	25	31	32	44	43	29	31
Receipts in the NIPAs	1,906	1,817	1,849	2,082	2,298	2,446	2,595	2,754	2,925	3,208	3,459	3,665
Expenditures												
Outlays (Budget)*	2,011	2,170	2,305	2,404	2,501	2,624	2,761	2,893	3,025	3,174	3,269	3,422
Differences												
Coverage												
Treatment of investment and depreciation	-12	-12	-15	-18	-21	-25	-28	-32	-36	-40	-43	-47
Contributions for government employees' retirement	37	36	37	37	38	39	41	43	44	45	46	48
Capital transfers	-44	-40	-46	-48	-50	-51	-51	-52	-52	-53	-54	-55
Lending and financial adjustments	9	15	13	21	21	17	17	13	13	13	14	14
Geographic adjustments	-13	-13	-14	-14	-14	-15	-16	-16	-17	-18	-19	-20
Universal Service Fund receipts	-5	-6	-6	-6	-6	-6	-6	-7	-7	-7	-7	-7
Other adjustments	2	-5	-6	-5	-6	-6	-5	-4	-3	-2	*	1
Subtotal, coverage	-26	-25	-37	-33	-38	-46	-49	-54	-58	-61	-63	-66

(Continued)

Table B-1.**Continued**

(In billions of dollars)

	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Differences (Continued)												
Timing adjustments	7	0	0	-12	3	9	0	0	0	-14	14	0
Netting												
Medicare premiums	26	28	32	34	37	40	43	46	50	54	59	64
Deposit insurance premiums	*	*	*	*	1	1	1	1	2	2	2	2
Government contributions for OASDI and HI for employees	12	13	13	14	15	16	17	18	19	20	21	23
Other	<u>9</u>	<u>13</u>	<u>10</u>	<u>9</u>	<u>8</u>	<u>8</u>	<u>7</u>	<u>6</u>	<u>6</u>	<u>4</u>	<u>3</u>	<u>2</u>
Subtotal, netting	47	54	55	58	61	65	69	72	77	81	85	90
Total Differences	28	29	18	13	26	28	20	18	19	6	36	25
Expenditures in the NIPAs	2,039	2,199	2,323	2,417	2,527	2,652	2,781	2,911	3,044	3,180	3,305	3,447
Deficit (-) or Surplus												
Budget Deficit (-) or Surplus^a	-158	-401	-480	-341	-225	-203	-197	-170	-145	-9	161	211
Differences												
Coverage												
Treatment of investment and depreciation	12	12	15	18	21	25	28	32	36	40	43	47
Contributions for government employees' retirement	-41	-40	-41	-41	-42	-43	-44	-46	-47	-48	-49	-51
Estate and gift taxes	-27	-22	-23	-22	-25	-23	-24	-26	-19	-22	-40	-43
Capital transfers	44	40	46	48	50	51	51	52	52	53	54	55
Lending and financial adjustments	-9	-15	-13	-21	-21	-17	-17	-13	-13	-13	-14	-14
Geographic adjustments	9	9	10	10	10	10	11	11	12	12	13	13
Universal Service Fund payments	*	*	-1	-1	-1	-1	*	*	*	*	*	*
Other	<u>-2</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>6</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>*</u>	<u>-1</u>
Subtotal, coverage	-14	-10	-1	-4	-2	8	9	12	23	23	6	6
Timing adjustments	-30	6	*	5	-3	-9	0	0	0	14	-14	0
Other	<u>69</u>	<u>22</u>	<u>6</u>	<u>4</u>	<u>1</u>	<u>-2</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>*</u>	<u>1</u>	<u>1</u>
Total Differences	25	19	5	5	-3	-3	11	13	25	37	-7	7
NIPA Deficit (-) or Surplus	-133	-382	-474	-335	-229	-206	-186	-157	-119	28	154	218

Source: Congressional Budget Office.

Note: * = between -\$500 million and \$500 million; OASDI = Old-Age, Survivors, and Disability Insurance; HI = Hospital Insurance.

a. Includes Social Security and the Postal Service.

get, however, the NIPAs do not record subsidy costs. Also, unlike the budget, the NIPAs include the interest receipts from credit programs (as part of federal net interest payments). Those differences in the treatment of credit programs are recorded in two places under "Expenditures" in Table B-1: the lending and financial adjustments show the differences in handling the loan subsidies, while the category "Other adjustments" captures the difference in treating loan interest.

Geographic Coverage

The NIPAs exclude all government transactions with Puerto Rico and the U.S. territories, whose current production is, by the NIPAs' definition, not part of U.S. GDP. Since those transactions are dominated by federal transfers, their exclusion tends to reduce the NIPAs' depiction of the federal deficit or increase its depiction of the surplus in comparison to that in the budget. That difference in coverage is shown as geographic adjustments in Table B-1.

Universal Service Fund

The budget, but not the NIPAs' federal sector, records the business activity of the Universal Service Fund, which provides resources to promote universal access to telecommunications. The fund receives federally required contributions from providers of interstate and international telecommunications service and disburses those funds to local providers that serve high-cost areas, low-income households, libraries, and schools, as well as to rural health care providers. The fund is administered by an independent nonprofit corporation (the Universal Fund Administration Company), which is regulated by the Federal Communications Commission.

Because of the limited role played by the government, the fund's receipts and payments are classified in the NIPAs as intracorporate transfers (from one business to another) and are not recorded in the federal sector of the accounts. The fund's revenues and outlays appear in the federal budget but have little net impact on the deficit or surplus. The difference in treatment of the Universal Service Fund is so labeled in Table B-1.

Timing Differences

The NIPAs attempt to measure income flows as much as possible on an accrual basis (when income is earned as opposed to when it is received) rather than on a cash basis.⁹ That approach makes sense in an integrated system of accounts that is tracking both production and income, because on an accrual basis the value of what is produced in a period should (measurement problems aside) match the total income generated. For example, BEA attributes corporate tax payments to the year in which the liabilities are incurred rather than to the time when the payments are actually made. However, the NIPAs are not entirely consistent in this respect: personal tax payments are counted as they are made and are not attributed back to the year of the liabilities. Currently, BEA is engaged in research to develop methods for preparing accrual-based estimates of personal tax payments.

Since the budget is mostly on a cash basis, while the NIPAs' federal sector is much more on an accrual basis, differences exist in a number of areas in the timing for recording transactions:

- **Corporate Taxes.** Tax legislation sometimes temporarily shifts the timing of corporate tax payments (usually from the end of one fiscal year to the beginning of the next one). The NIPAs exclude such timing shifts, which are not consistent with accrual accounting. The timing adjustments for the effects of the Economic Growth and Tax Relief Reconciliation Act of 2001 and the Jobs and Growth Tax Relief Reconciliation Act of 2003 are shown as "Timing shift of corporate estimated tax payments" in Table B-1.

Although corporations make estimated tax payments throughout the year, any shortfalls (or overpayments) are corrected in the form of final payments (or refunds) in subsequent years. The NIPAs shift those

9. See United Nations, *System of National Accounts* (1993), section 3.19, which argues for reporting transactions on an accrual basis. Many of the conceptual revisions to the NIPAs have been based on the guidelines enumerated in that U.N. document.

final payments back to the year in which corporate profits that gave rise to the tax liabilities actually were generated, while the budget records them on a cash basis. The results of that difference are difficult to identify for recent history and thus appear under "Other" (the last category under "Receipts") in Table B-1.¹⁰

- **Personal Taxes.** Although personal taxes are not recorded on an accrual basis in the NIPAs, nevertheless BEA wants to avoid large, distorting upward or downward spikes in personal disposable income due to timing quirks. Such quirks occur, for example, in April of each year, when most final settlements for the previous year's personal taxes are paid. In the NIPAs, therefore, those settlements are evenly spread over the four quarters of the calendar year in which they are paid. (That treatment is similar to accrual accounting in terms of its smoothness but differs because it does not move payments back to the year in which the liabilities occurred.) That procedure of smoothing can alter the relationship of the NIPAs and the budget accounts for fiscal years because it moves some receipts into the last quarter of the calendar year and thus into the following fiscal year. Those adjustments are difficult to identify for recent history and thus are not shown separately in Table B-1, but appear in the "Other" category under "Receipts."
- **Transfers and Military Compensation.** Timing adjustments are needed on the spending side of the NIPAs to align government transfer payments (for example, veterans' benefits, Supplemental Security

Income (SSI), and Medicare's HMO [health maintenance organization] payments) and military compensation with income that is reported on an accrual basis in the NIPAs. Misalignments can occur because of quirks in the calendar. For example, although SSI payments are usually sent out on the first day of each month, the checks are sometimes mailed a day or more in advance. That typically occurs when the first of the month falls on a weekend or holiday.

If that situation occurs for the October payments, the payments will be pushed into the previous fiscal year in the budget. In such cases, the NIPAs introduce a timing adjustment that effectively puts the payments back on the first day of the month. Hence, the NIPAs' adjustment always ensures that there are exactly 12 monthly SSI payments in a year, whereas in the budget, there can be 11 in some years and 13 in others. For military compensation, which is paid twice a month, at the beginning and middle, the adjustment in the NIPAs always ensures 24 payments in the year, whereas in the budget, there can be 23 in some years and 25 in others. The timing adjustments for expenditures in Table B-1 reflect that regularizing for transfers and for military pay.

Business Activities

The NIPAs and the federal budget both treat certain receipts as offsetting receipts (negative outlays) when they result from voluntary transactions with the public that resemble business activities, such as the proceeds from the sale of postage stamps or government publications. However, the NIPAs generally have a stricter view of what resembles a business transaction. In particular, Medicare premiums, deposit insurance premiums, rents, royalties, and regulatory or inspection fees are deemed equivalent to business transactions in the budget but not in the NIPAs. Consequently, those transactions (negative outlays in the budget) are treated in the NIPAs as government receipts (social insurance receipts and business "non-taxes"—fines and fees), rather than as negative outlays. Those differences are recorded under "Netting" in Table B-1. Because they affect total revenues and outlays by exactly the same amounts, they have no effect on the federal deficit or surplus.

10. "Other" includes timing differences not shown elsewhere in Table B-1, plus discrepancies between figures in the NIPAs and the budget that may become much smaller after BEA makes its annual revisions to its estimates of federal receipts. Those revisions, which can be large at times, often reflect the effects on receipts of economic developments (such as lower-than-expected growth in profits) that do not show up until a year or more later when the Internal Revenue Service's tax data on corporate liabilities become available.

Presentation of the Federal Government's Receipts and Expenditures in the NIPAs

Like the budget, the federal sector of the NIPAs classifies receipts by type, but the categories differ somewhat (*see Table B-2*). The NIPAs' classifications help to determine measures of such things as disposable income and corporate profits after tax. Taxes and fees paid by individuals are the leading source of government receipts in the 2003-2013 period. The next largest source is contributions for social insurance programs—a category that includes Social Security taxes, Medicare taxes and premiums, and unemployment insurance taxes. The remaining categories of receipts are accruals of taxes on corporate profits, including the earnings of the Federal Reserve System, and indirect business taxes (like customs duties and excise taxes) and nontax accruals (like deposit insurance premiums).

In the NIPAs, the government's expenditures are classified according to their purpose, and the groupings, which are fewer than those in the federal budget, separate government consumption expenditures from other transactions, which is important for computing GDP. Defense and nondefense consumption of goods and services are purchases made by the government for its immediate use. (The largest share of current defense and nondefense consumption is the compensation of military and civilian federal employees.) The depreciation of its stock of capital corresponds to the services that the government receives from its fixed assets, such as buildings or equipment; as noted earlier, that depreciation appears in the accounts as consumption of fixed capital.

Transfer payments (cash payments made directly to individuals, private entities, or foreign nations) constitute another grouping, as do grants-in-aid—payments that the federal government makes to state or local governments,

which generally use them for transfers (such as Temporary Assistance for Needy Families benefits) and consumption (such as the hiring of additional police officers).

Although both the NIPAs and the budget contain a category labeled "net interest," the figure in the NIPAs is larger. Various differences cause the two measures to diverge. The biggest difference is the contrasting treatment of the interest received by the Civil Service and Military Retirement Trust Funds. In the NIPAs, such receipts are reclassified as contributions to personal income and do not appear in the government sector. In the budget, however, those trust fund receipts offset the outlays by the Treasury for those interest payments.

The category in the NIPAs labeled "Subsidies less current surplus of government enterprises" contains two components, as its name suggests. The first—subsidies—is defined as grants paid by the federal government to businesses, including state and local government enterprises such as public housing authorities. Such housing assistance dominates that portion of the category. The second part of the category is the current surplus of government enterprises, which are certain businesslike operations owned by the government, such as the Postal Service.¹¹ The operating costs of a government enterprise are mostly covered by the sale of goods and services to the public rather than by tax receipts. The difference between sales and current operating expenses is the enterprise's surplus or deficit.

11. Government enterprises, such as the Postal Service, should not be confused with government-sponsored enterprises, or GSEs, which are private entities established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency. Examples of GSEs include Fannie Mae and the Farm Credit System. As privately owned, though publicly chartered, corporations, GSEs are not included in either the budget or the federal sector of the NIPAs.

Table B-2.

Projections of Baseline Receipts and Expenditures as Measured by the National Income and Product Accounts

(In billions of dollars)

	Actual 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Receipts												
Personal Tax and Nontax Receipts	897	784	760	894	1,006	1,092	1,177	1,277	1,385	1,598	1,776	1,903
Contributions for Social Insurance ^a	731	751	796	842	892	942	991	1,041	1,092	1,146	1,202	1,262
Corporate Profits Tax Accruals	169	172	183	233	282	289	301	307	315	328	341	357
Indirect Business Tax and Nontax Accruals	<u>110</u>	<u>111</u>	<u>110</u>	<u>113</u>	<u>118</u>	<u>123</u>	<u>126</u>	<u>129</u>	<u>133</u>	<u>136</u>	<u>140</u>	<u>144</u>
Total	1,906	1,817	1,849	2,082	2,298	2,446	2,595	2,754	2,925	3,208	3,459	3,665
Expenditures												
Purchases of Goods and Services												
Defense												
Consumption	311	365	409	425	435	445	457	469	481	494	506	520
Consumption of fixed capital	64	66	67	67	67	68	68	69	69	69	70	70
Nondefense ^b												
Consumption	165	186	197	200	203	207	211	215	220	225	230	236
Consumption of fixed capital	<u>30</u>	<u>33</u>	<u>34</u>	<u>36</u>	<u>38</u>	<u>40</u>	<u>43</u>	<u>45</u>	<u>47</u>	<u>50</u>	<u>52</u>	<u>55</u>
Subtotal	570	649	707	728	744	760	779	798	818	838	859	881
Transfer Payments												
Domestic	898	955	993	1,031	1,072	1,123	1,183	1,248	1,320	1,399	1,472	1,564
Foreign	<u>15</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>22</u>	<u>22</u>	<u>22</u>	<u>21</u>	<u>21</u>	<u>21</u>
Subtotal	912	973	1,013	1,052	1,093	1,144	1,204	1,270	1,342	1,420	1,492	1,585
Grants-in-Aid to State and Local Governments ^b	299	331	355	357	372	392	413	436	463	491	521	555
Net Interest ^b	213	201	199	229	267	305	335	357	372	381	382	375
Subsidies Less Current Surplus of Government Enterprises	<u>45</u>	<u>45</u>	<u>50</u>	<u>52</u>	<u>51</u>	<u>51</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>51</u>	<u>51</u>
Total	2,039	2,199	2,323	2,417	2,527	2,652	2,781	2,911	3,044	3,180	3,305	3,447
Deficit (-) or Surplus												
NIPA Deficit (-) or Surplus ^b	-133	-382	-474	-335	-229	-206	-186	-157	-119	28	154	218

Source: Congressional Budget Office.

a. Includes Social Security taxes, Medicare taxes and premiums, and unemployment insurance taxes.

b. Includes Social Security and the Postal Service.

C

CBO's Economic Projections for 2003 Through 2013

Year-by-year economic projections for 2003 through 2013 are shown in the accompanying tables (*by calendar year in Table C-1 and by fiscal year in Table C-2*). The Congressional Budget Office did not try to explicitly incorporate cyclical recessions and recoveries

into its projections for years after 2004. Instead, the projected values shown here for 2005 through 2013 reflect CBO's assessment of average values for that period—which take into account potential ups and downs in the business cycle.

Table C-1.

CBO's Year-by-Year Forecast and Projections for Calendar Years 2003 Through 2013

	Actual 2002	Forecast		Projected								
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Nominal GDP (Billions of dollars)	10,446	10,836	11,406	12,025	12,706	13,391	14,098	14,823	15,559	16,312	17,105	17,943
Nominal GDP (Percentage change)	3.6	3.7	5.3	5.4	5.7	5.4	5.3	5.1	5.0	4.8	4.9	4.9
Real GDP (Percentage change)	2.4	2.2	3.8	3.5	3.3	3.2	3.0	2.9	2.7	2.6	2.6	2.6
GDP Price Index (Percentage change)	1.1	1.5	1.4	1.8	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2
Consumer Price Index ^a (Percentage change)	1.6	2.3	1.9	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Employment Cost Index ^b (Percentage change)	3.3	3.0	3.2	3.2	3.2	3.3	3.4	3.4	3.4	3.4	3.4	3.4
Unemployment Rate (Percent)	5.8	6.2	6.2	5.7	5.4	5.3	5.2	5.2	5.2	5.2	5.2	5.2
Three-Month Treasury Bill Rate (Percent)	1.6	1.0	1.7	3.2	4.0	4.7	4.9	4.9	4.9	4.9	4.9	4.9
Ten-Year Treasury Note Rate (Percent)	4.6	4.0	4.6	5.5	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Tax Bases (Percentage of GDP)												
Corporate book profits	6.4	6.8	7.0	10.1	9.9	9.3	8.9	8.6	8.4	8.4	8.4	8.4
Wages and salaries	47.8	47.3	47.3	47.4	47.4	47.4	47.4	47.4	47.4	47.5	47.5	47.5
Tax Bases (Billions of dollars)												
Corporate book profits	665	742	797	1,210	1,255	1,251	1,261	1,269	1,308	1,367	1,430	1,503
Wages and salaries	4,996	5,128	5,394	5,695	6,021	6,349	6,685	7,029	7,381	7,741	8,119	8,518

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Note: Percentage change is year over year.

a. The consumer price index for all urban consumers.

b. The employment cost index for wages and salaries of private-industry workers.

Table C-2.**CBO's Year-by-Year Forecast and Projections for Fiscal Years
2003 Through 2013**

	Actual 2002	Forecast		Projected								
		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Nominal GDP (Billions of dollars)	10,337	10,730	11,245	11,869	12,536	13,219	13,920	14,640	15,375	16,122	16,901	17,729
Nominal GDP (Percentage change)	3.0	3.8	4.8	5.5	5.6	5.5	5.3	5.2	5.0	4.9	4.8	4.9
Real GDP (Percentage change)	1.7	2.3	3.4	3.7	3.5	3.3	3.0	2.9	2.8	2.6	2.6	2.6
GDP Price Index (Percentage change)	1.3	1.5	1.3	1.8	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2
Consumer Price Index ^a (Percentage change)	1.5	2.3	1.9	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Employment Cost Index ^b (Percentage change)	3.5	2.9	3.2	3.2	3.2	3.3	3.4	3.6	3.6	3.6	3.6	3.6
Unemployment Rate (Percent)	5.7	6.1	6.3	5.8	5.5	5.3	5.3	5.2	5.2	5.2	5.2	5.2
Three-Month Treasury Bill Rate (Percent)	1.7	1.1	1.4	3.0	3.8	4.6	4.9	4.9	4.9	4.9	4.9	4.9
Ten-Year Treasury Note Rate (Percent)	4.8	3.9	4.4	5.3	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
Tax Bases (Percentage of GDP)												
Corporate book profits	6.2	6.8	7.0	9.3	10.0	9.4	9.0	8.7	8.4	8.4	8.4	8.4
Wages and salaries	48.1	47.4	47.3	47.3	47.4	47.4	47.4	47.4	47.4	47.5	47.5	47.5
Tax Bases (Billions of dollars)												
Corporate book profits	641	726	787	1,100	1,251	1,248	1,260	1,267	1,296	1,352	1,414	1,483
Wages and salaries	4,973	5,082	5,318	5,619	5,940	6,267	6,600	6,942	7,293	7,650	8,022	8,416

Sources: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

Note: Percentage change is year over year.

a. The consumer price index for all urban consumers.

b. The employment cost index for wages and salaries of private-industry workers.

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Contributors to the Revenue and Spending Projections

The following Congressional Budget Office analysts prepared the revenue and spending projections in this report:

Revenue Projections

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